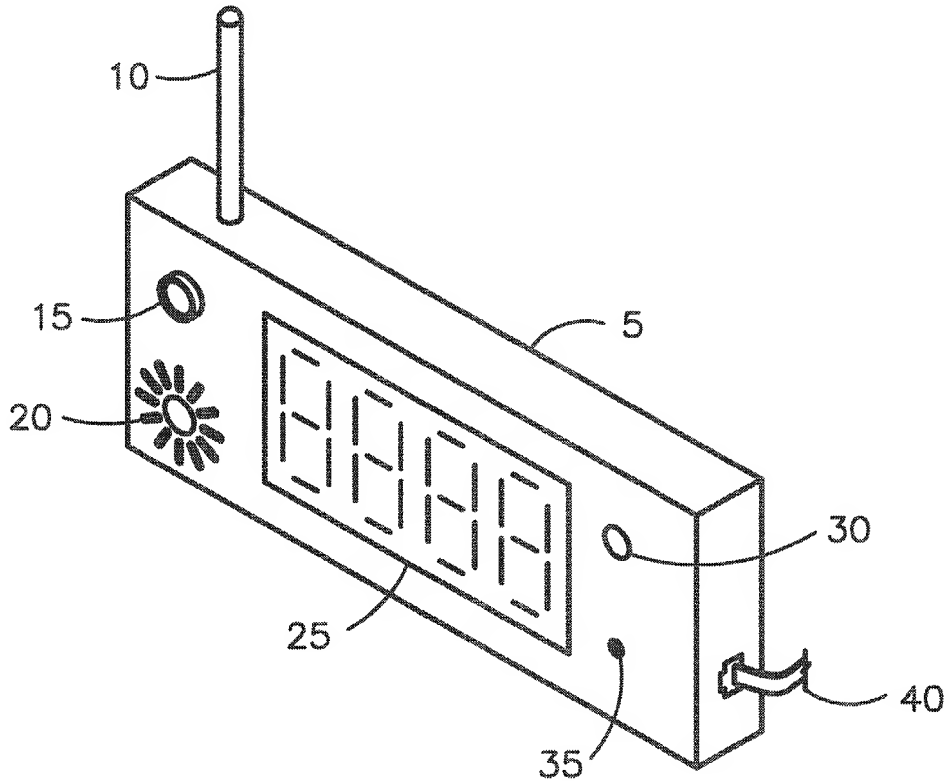


FIG. 1

20807D" DET99660

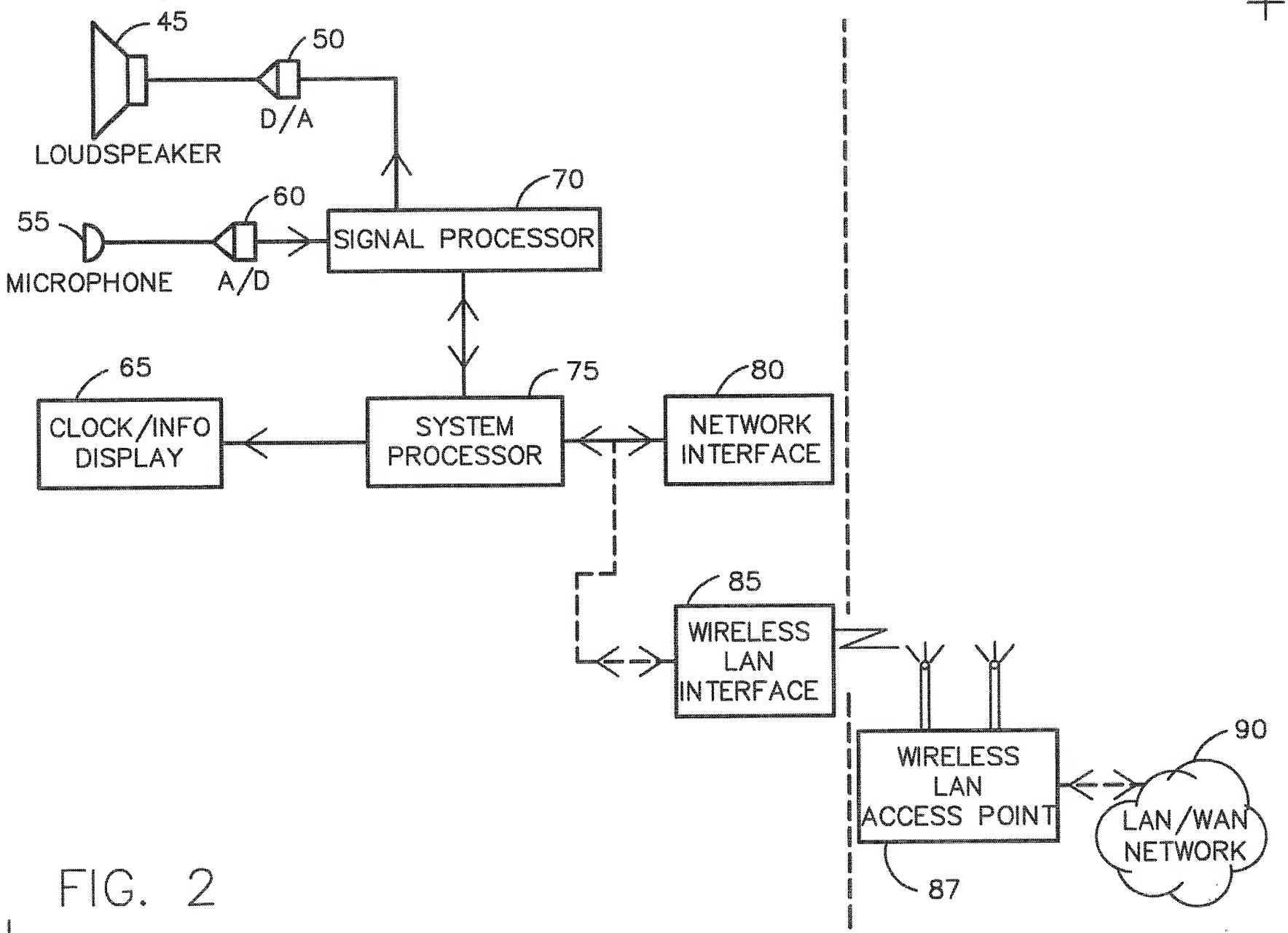


FIG. 2

20030D*0E199660

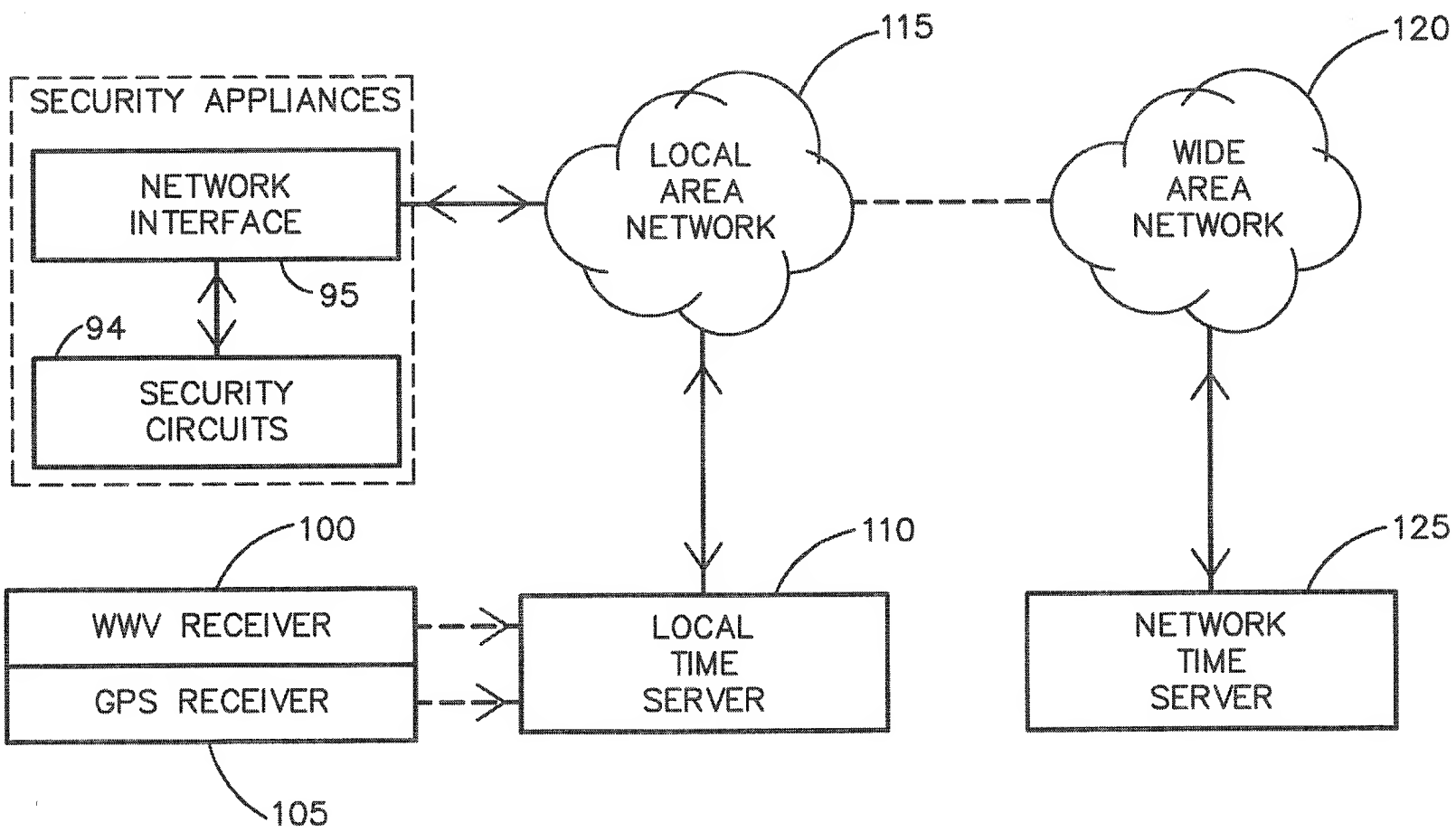


FIG. 3

20801D "0ET99660

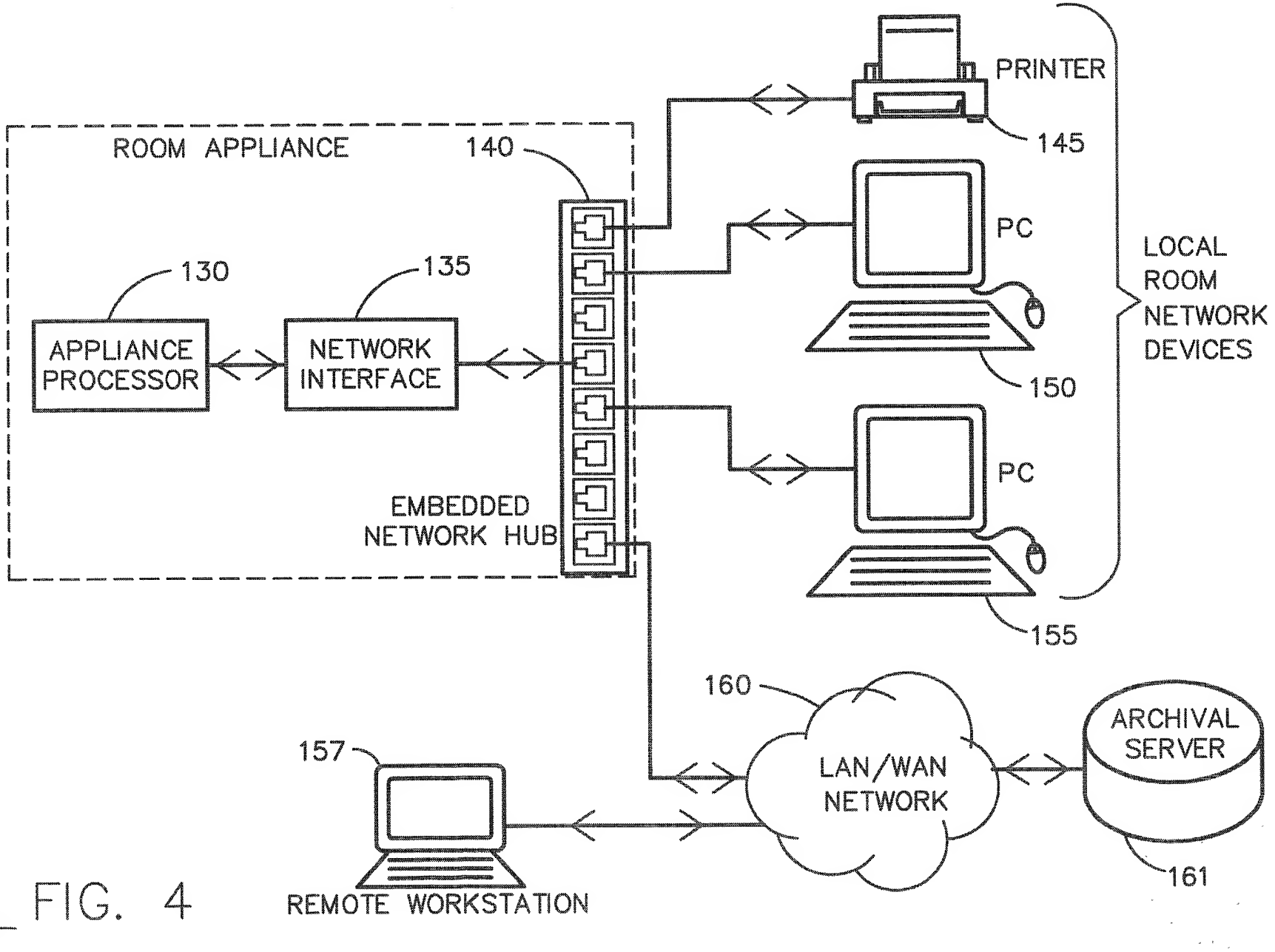


FIG. 4

20801D" DET99660

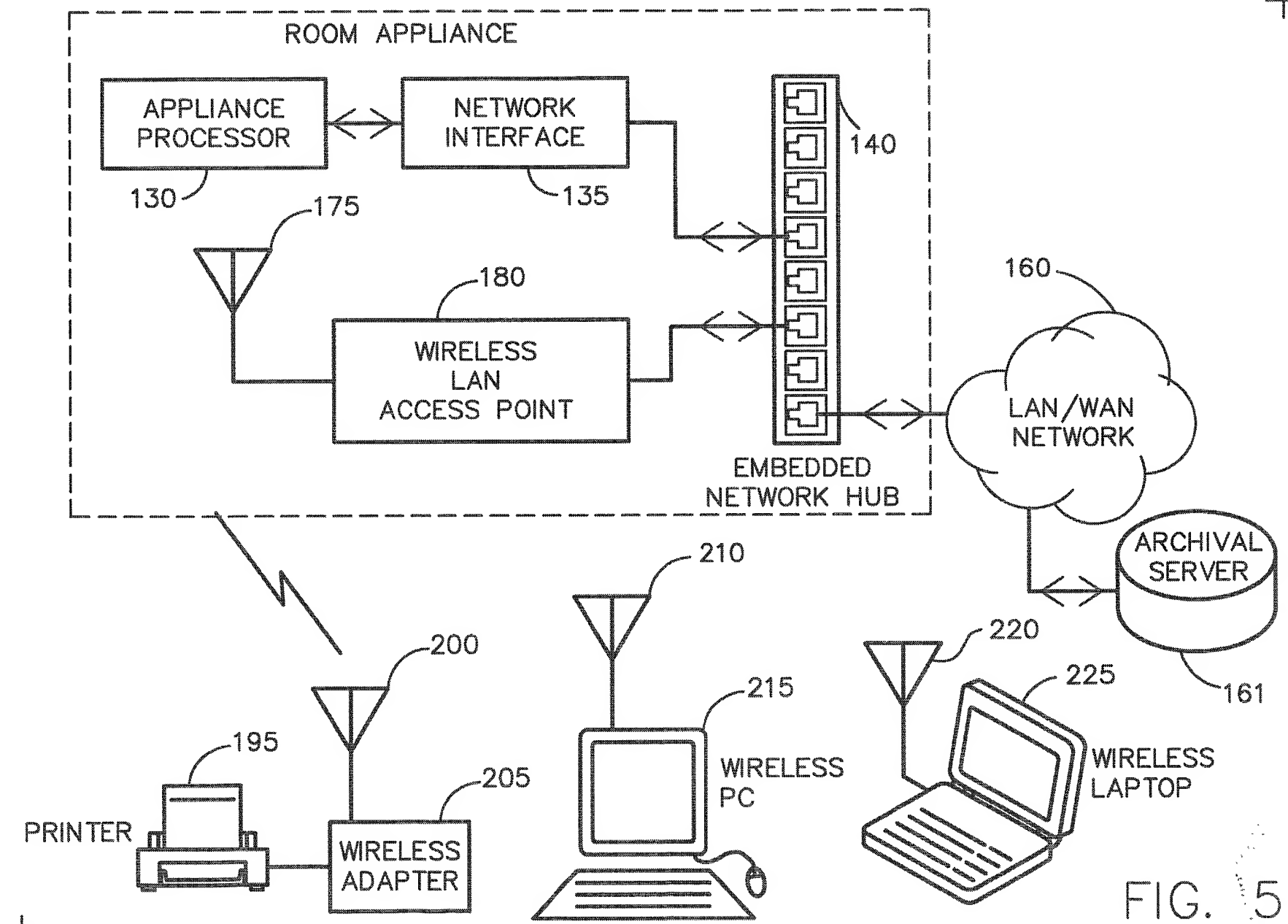


FIG. 5

20801D" DE199660

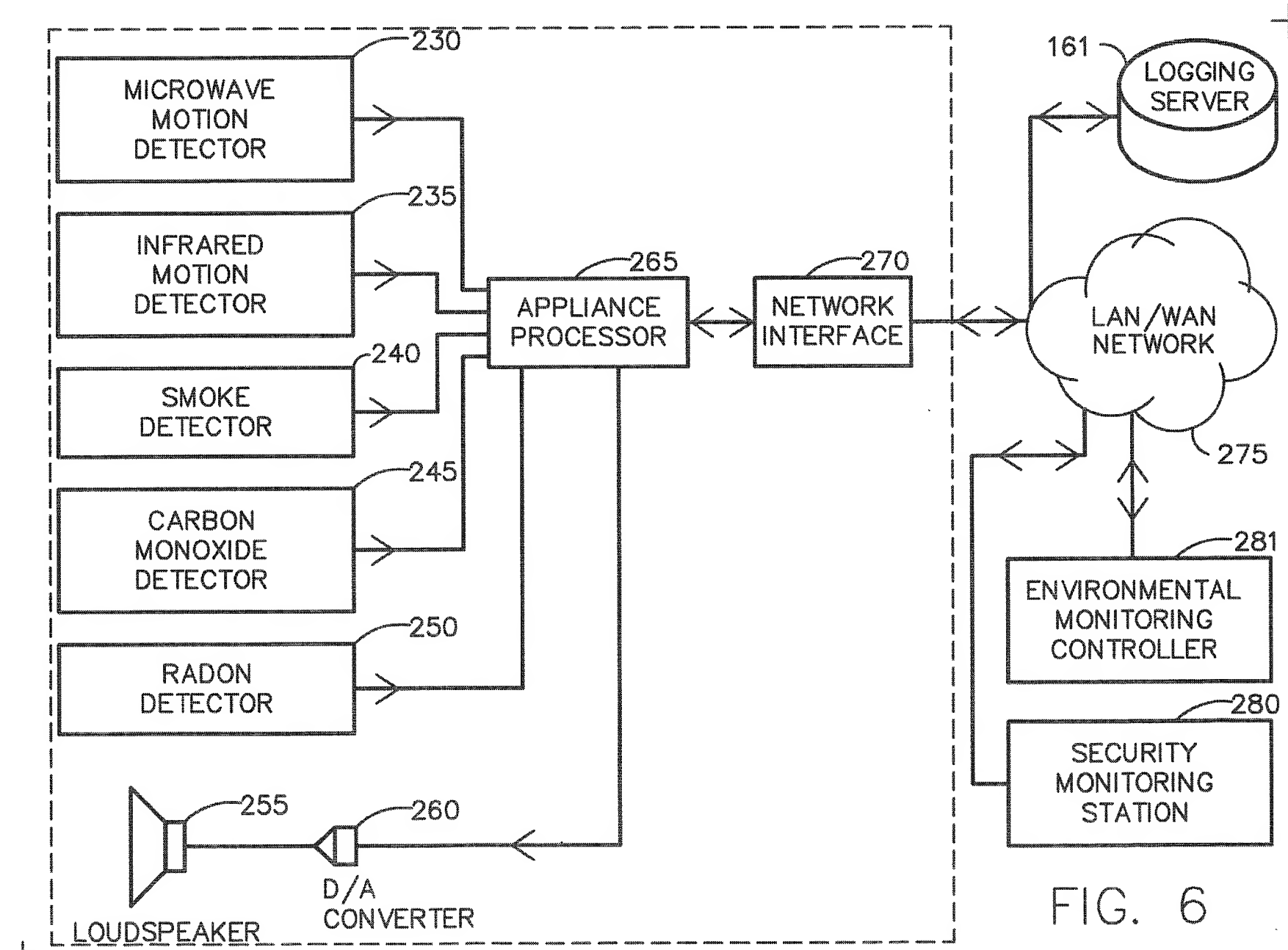


FIG. 6

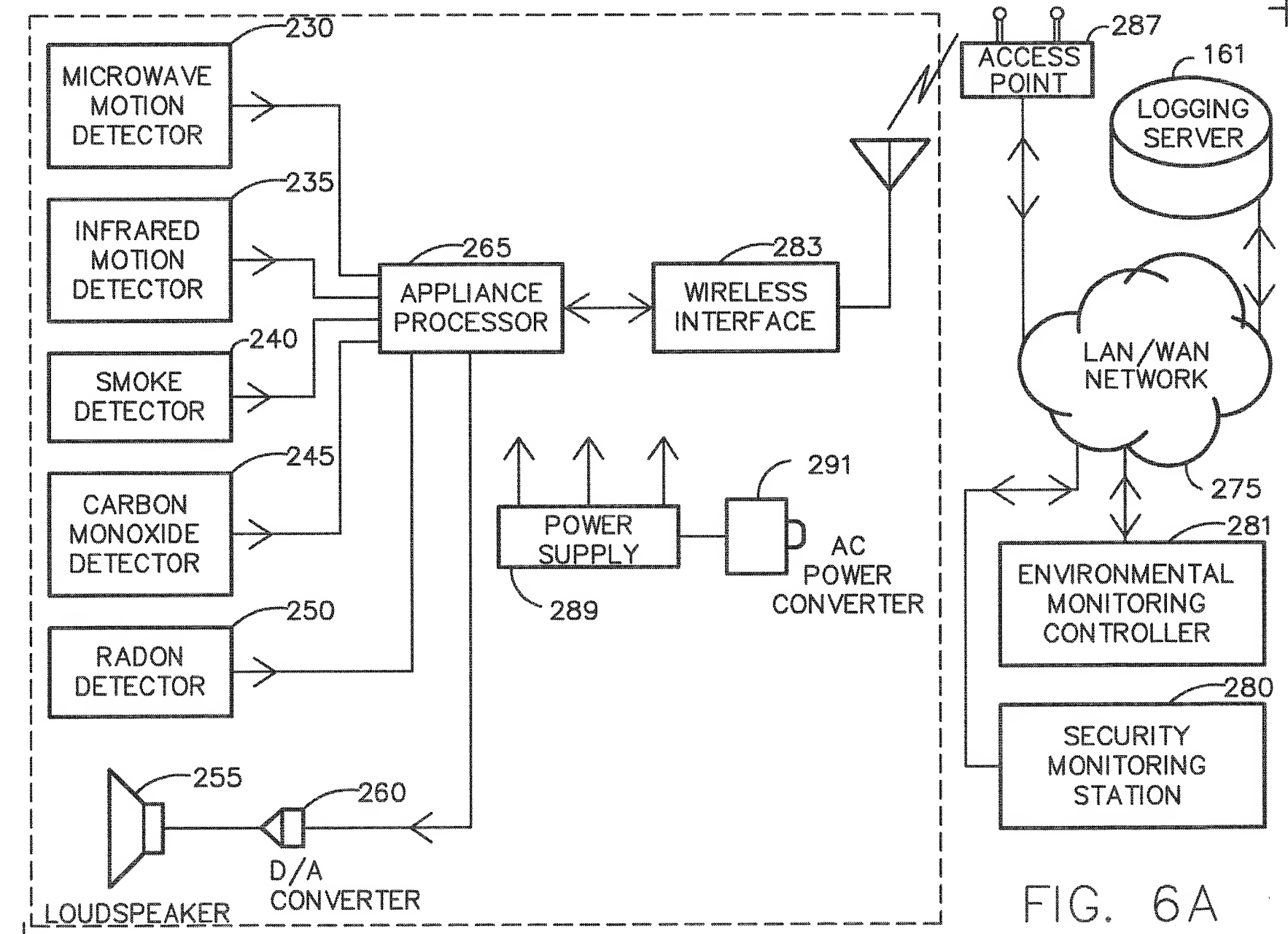

230
MICROWAVE MOTION DETECTOR
235
INFRARED MOTION DETECTOR
240
SMOKE DETECTOR
245
CARBON MONOXIDE DETECTOR
250
RADON DETECTOR
265
APPLIANCE PROCESSOR
283
WIRELESS INTERFACE
291
POWER SUPPLY
289
AC POWER CONVERTER
255
LOUDSPEAKER
260
D/A CONVERTER
287
ACCESS POINT
161
LOGGING SERVER
LAN/WAN NETWORK
275
281
ENVIRONMENTAL MONITORING CONTROLLER
280
SECURITY MONITORING STATION

FIG. 6A

20807D" DET99660

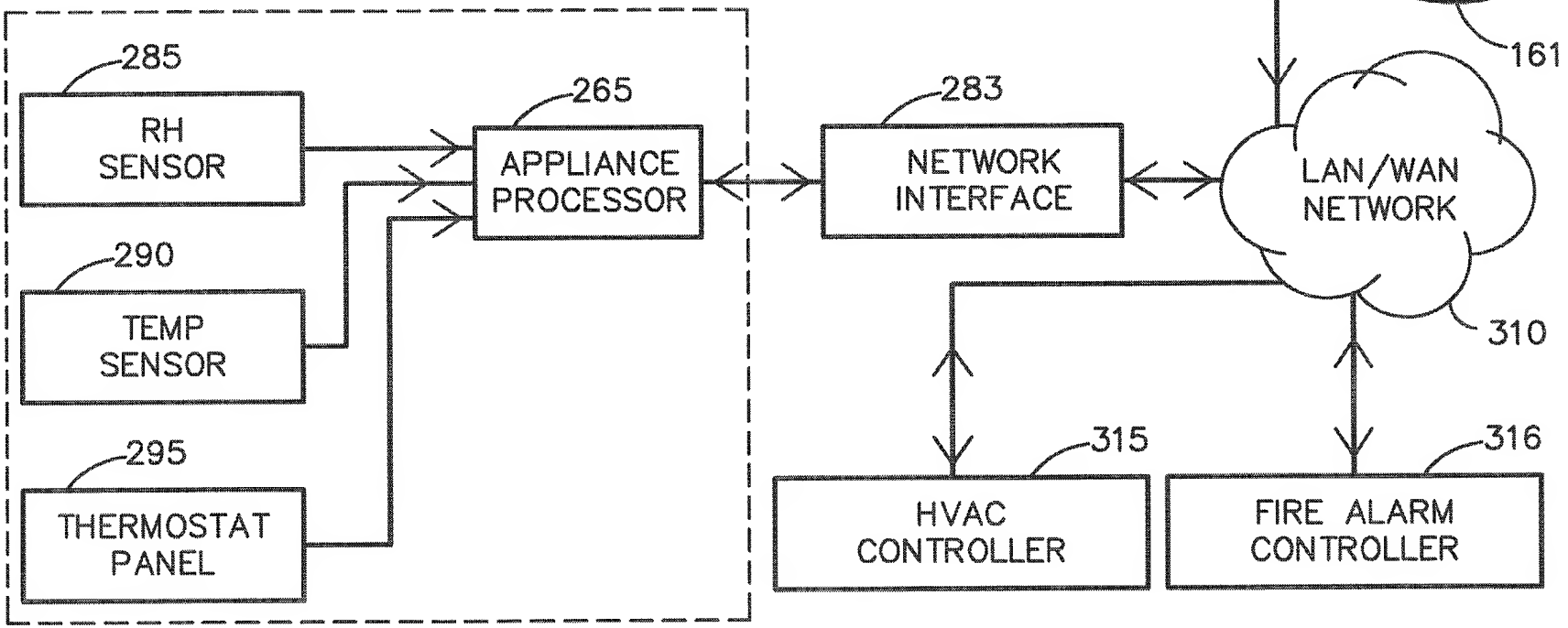


FIG. 7

20080TO'0EF99660

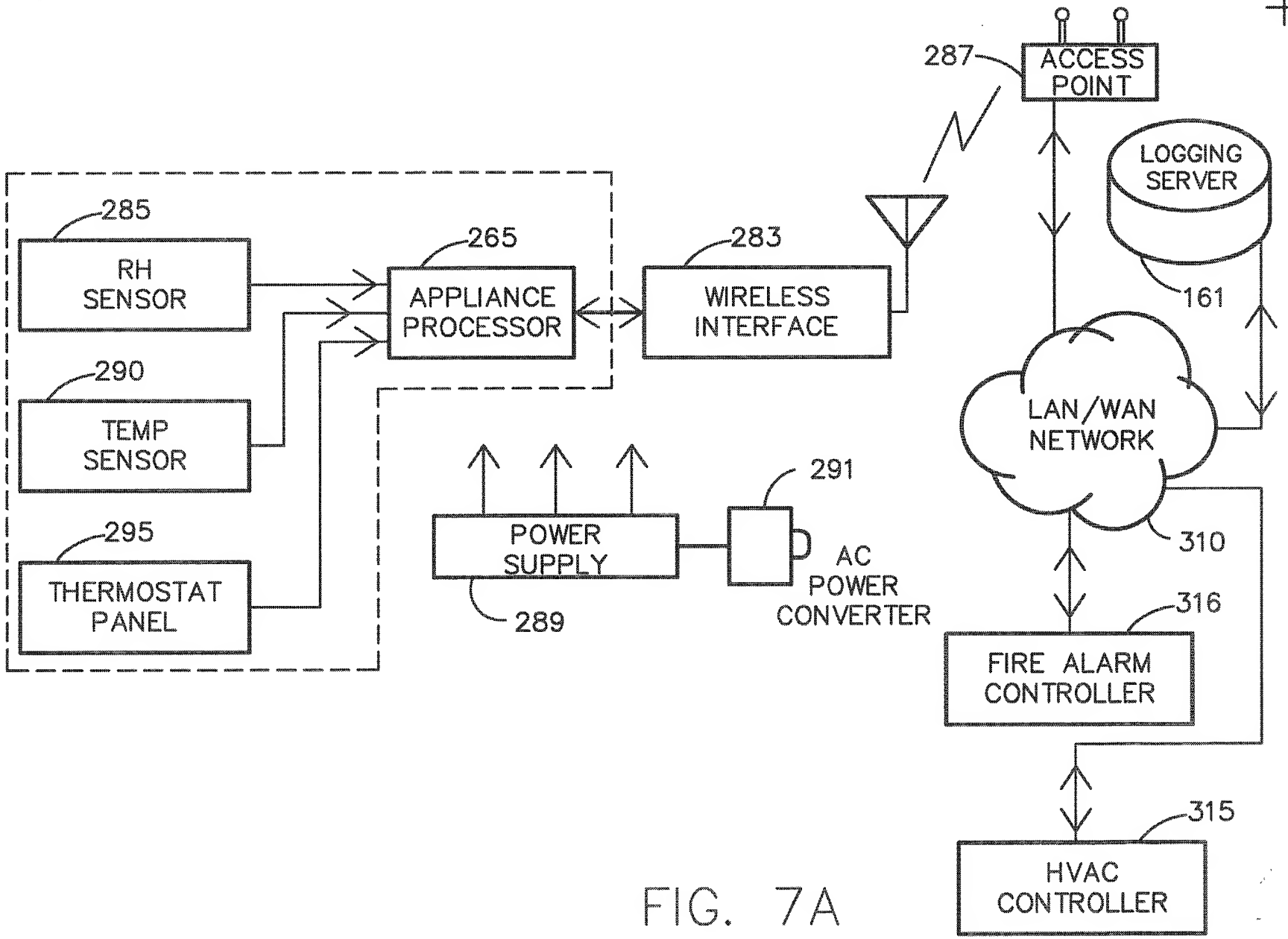


FIG. 7A

20801D" DET99660

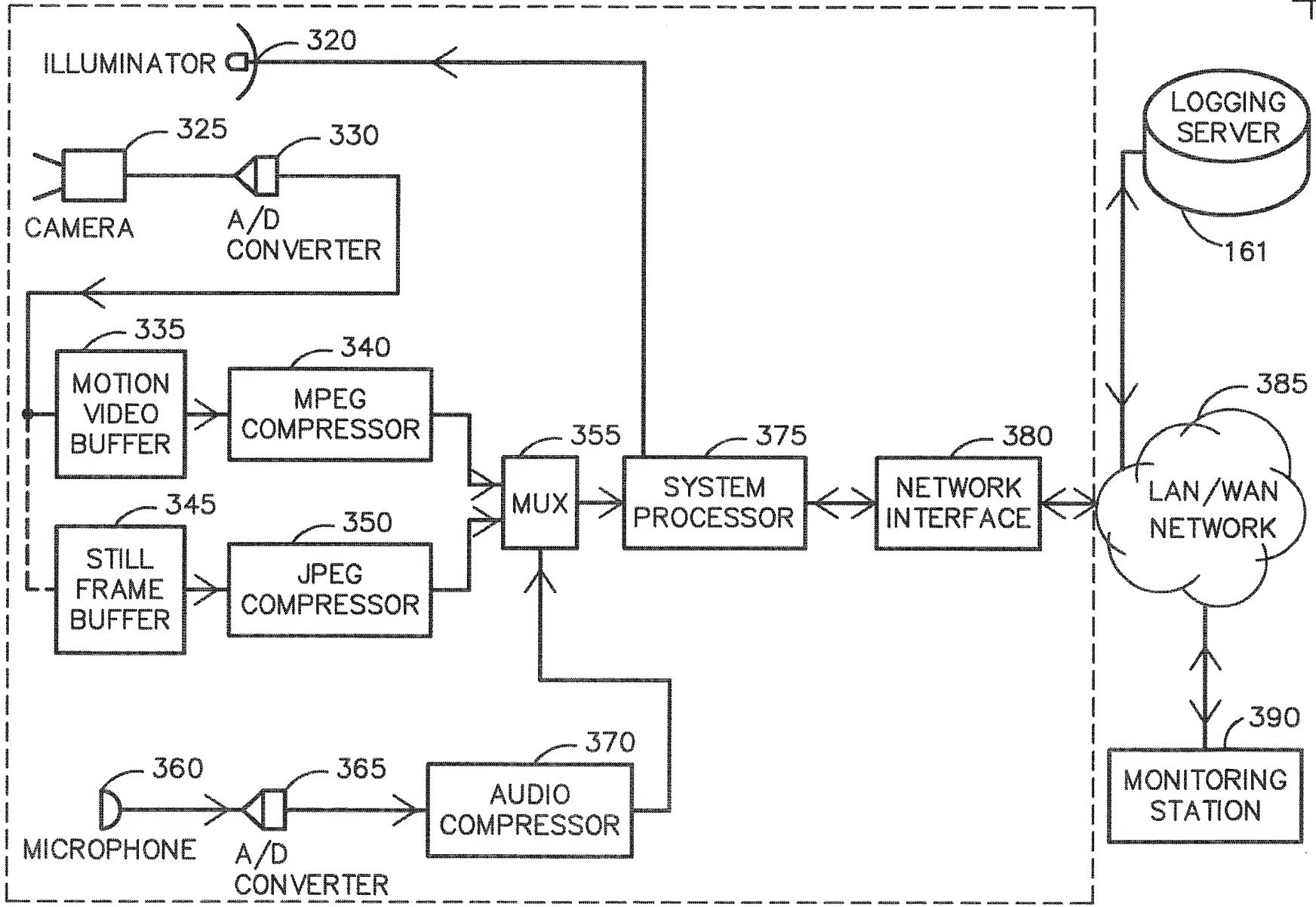


FIG. 8

20080702 DET99660

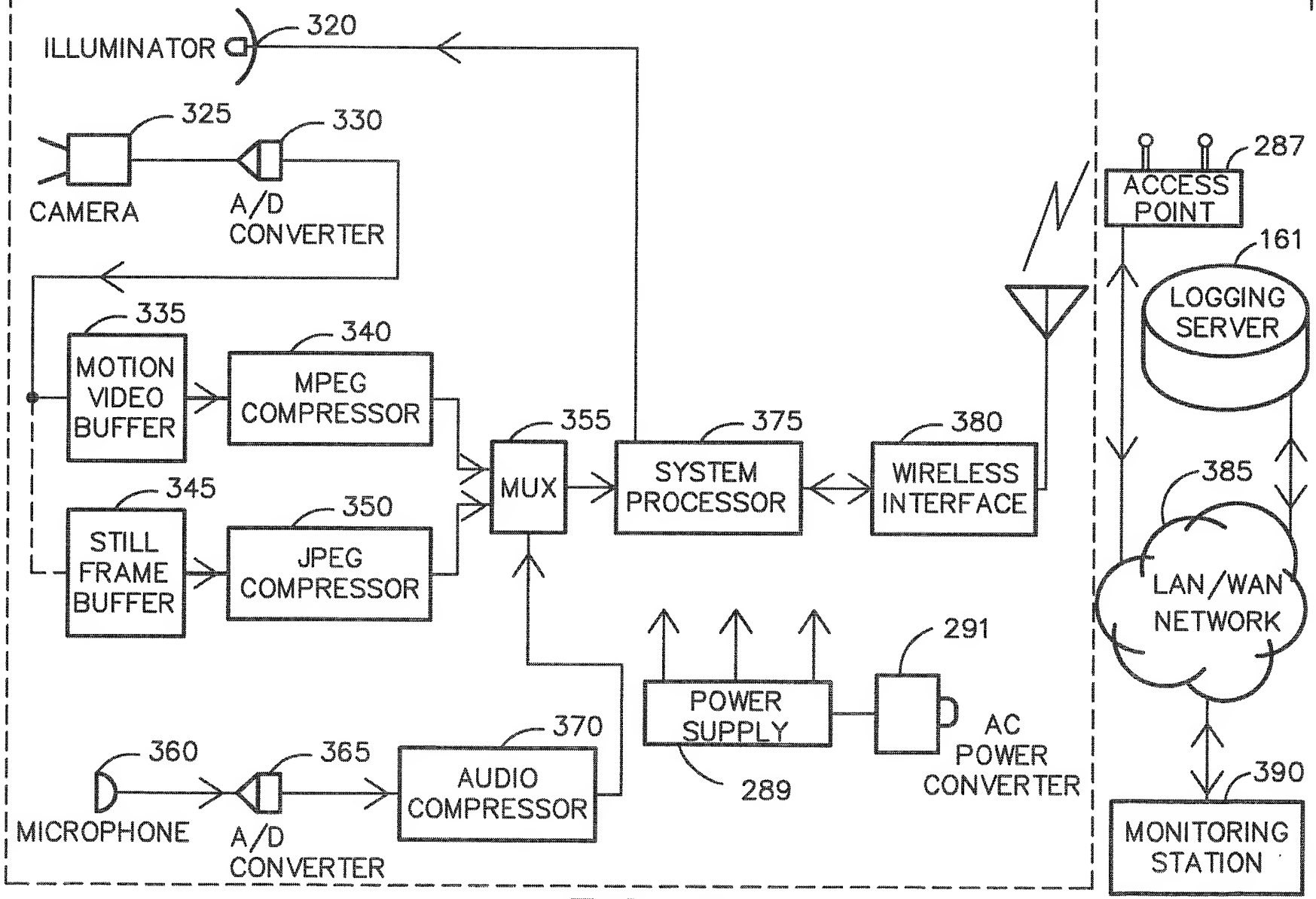


FIG. 8A

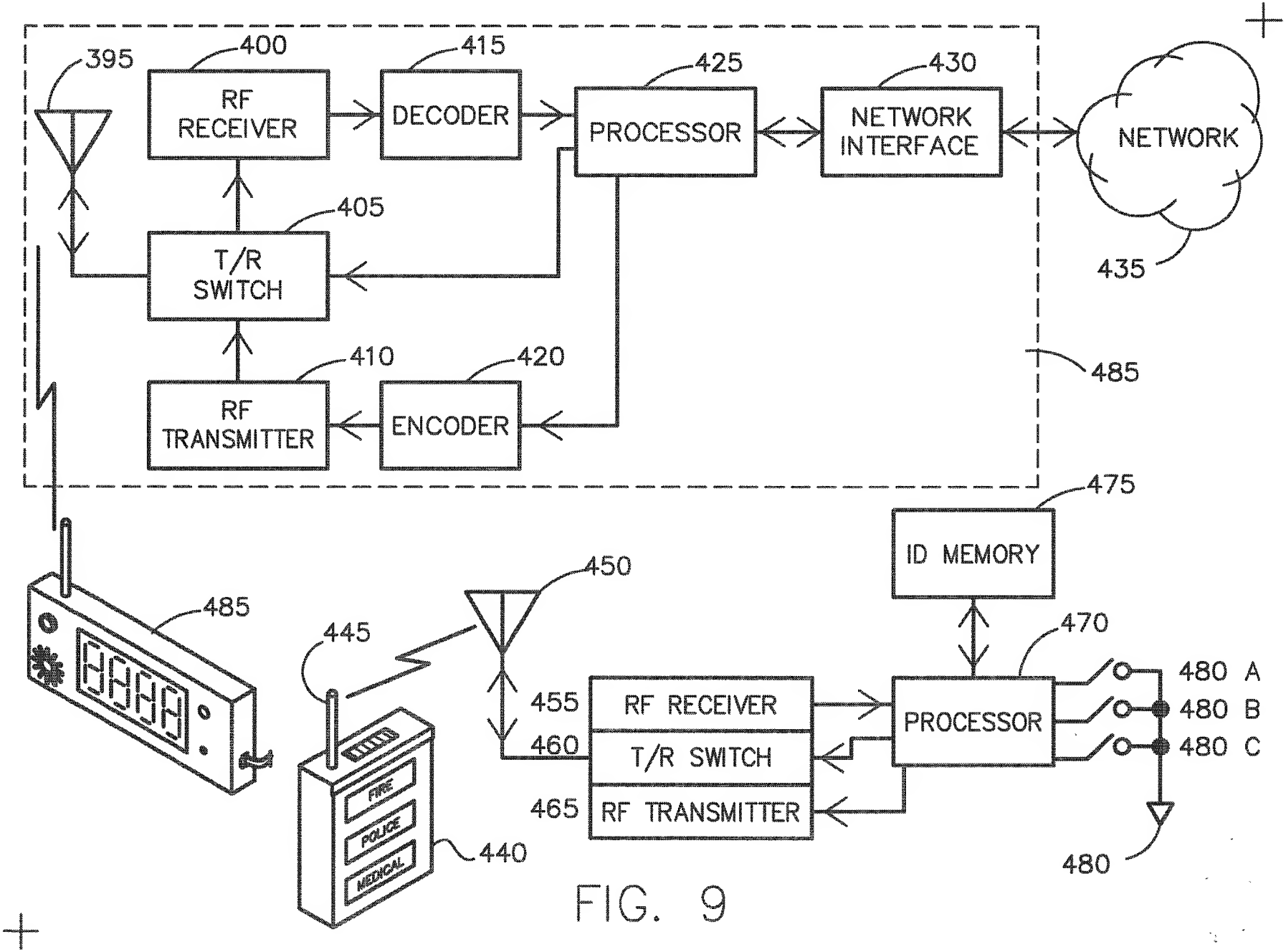

395
400
RF RECEIVER
415
DECODER
425
PROCESSOR
430
NETWORK INTERFACE
NETWORK
435
405
T/R SWITCH
410
RF TRANSMITTER
420
ENCODER
485
475
ID MEMORY
450
485
445
470
480 A
480 B
480 C
455
RF RECEIVER
460
T/R SWITCH
465
RF TRANSMITTER
PROCESSOR
480
FIRE
POLICE
MEDICAL
440

FIG. 9

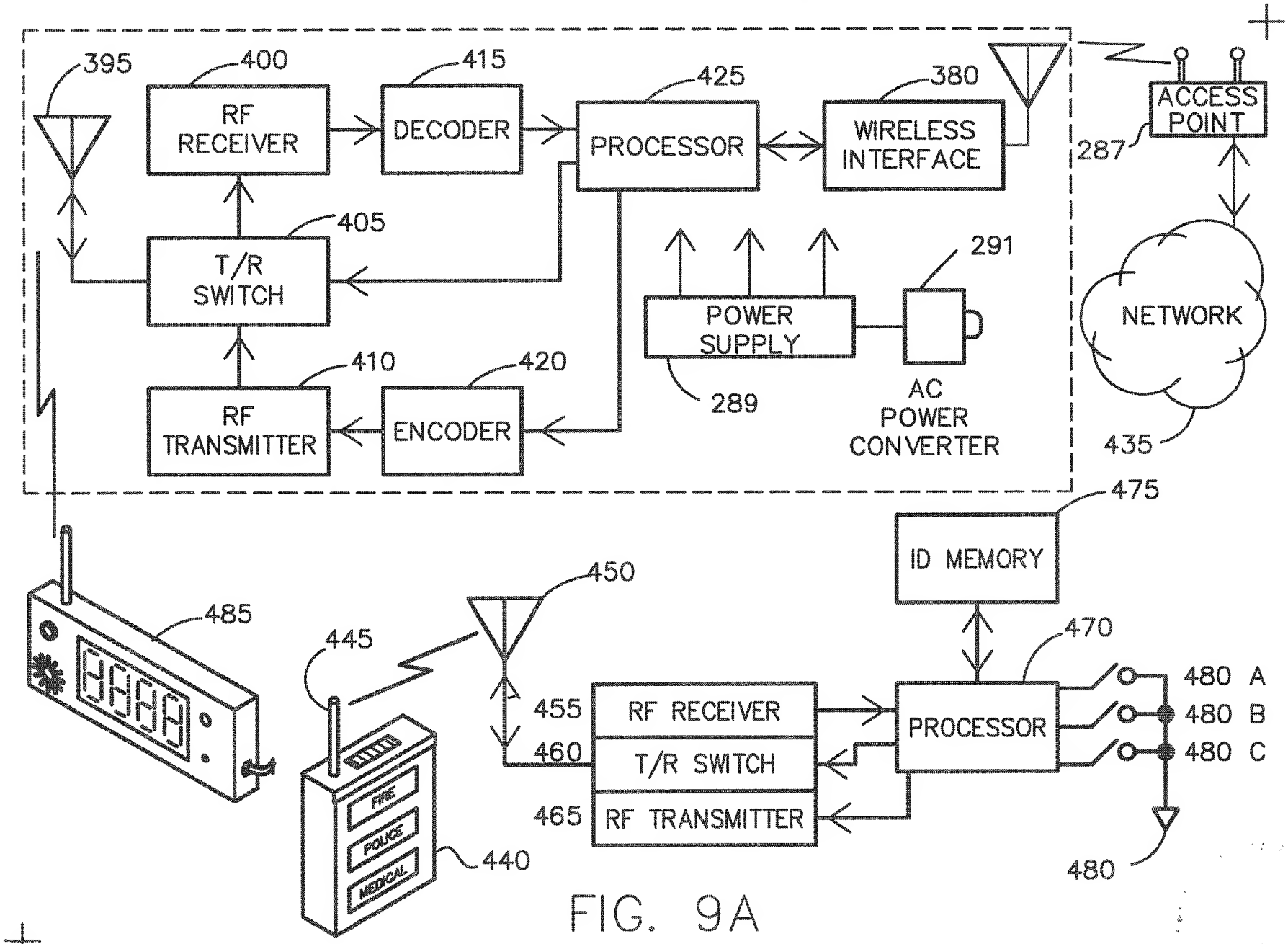

395
400
RF RECEIVER
415
DECODER
425
PROCESSOR
380
WIRELESS INTERFACE
ACCESS POINT
287
405
T/R SWITCH
291
POWER SUPPLY
289
AC POWER CONVERTER
NETWORK
435
410
RF TRANSMITTER
420
ENCODER
475
ID MEMORY
450
485
445
470
455
RF RECEIVER
460
T/R SWITCH
465
RF TRANSMITTER
PROCESSOR
480 A
480 B
480 C
480
FIRE
POLICE
MEDICAL
440

FIG. 9A

09565150 - 041602

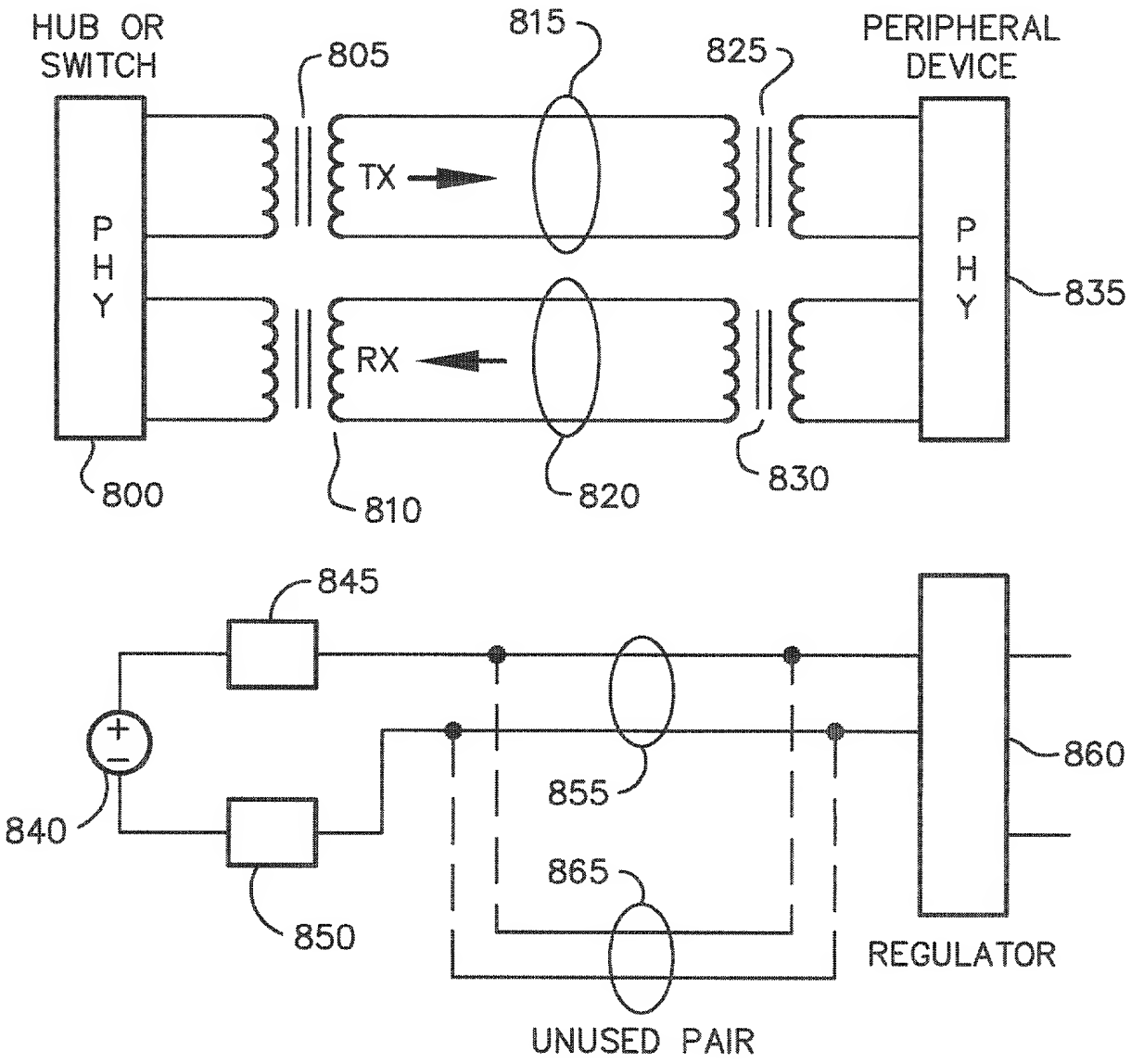


FIG. 10

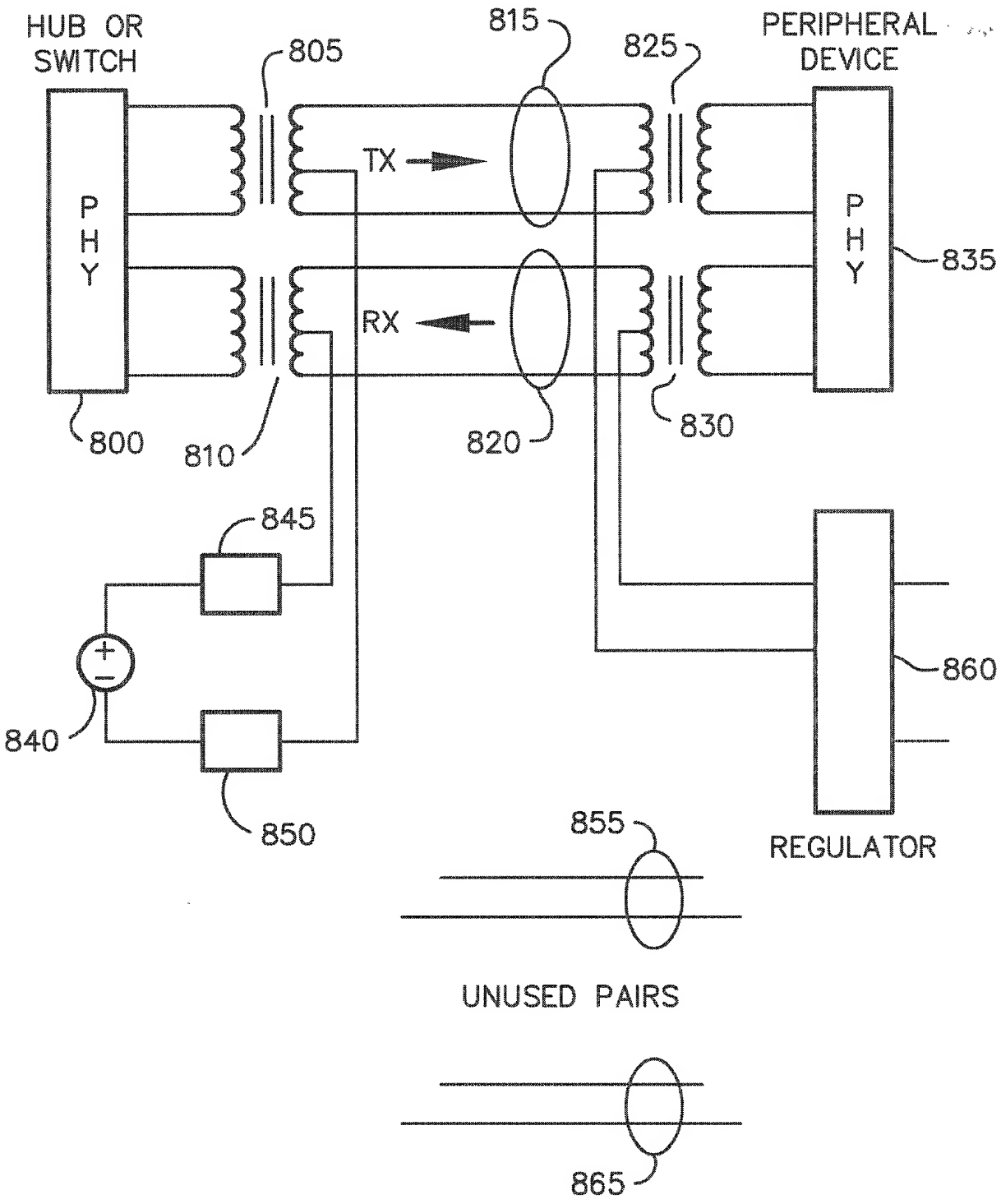
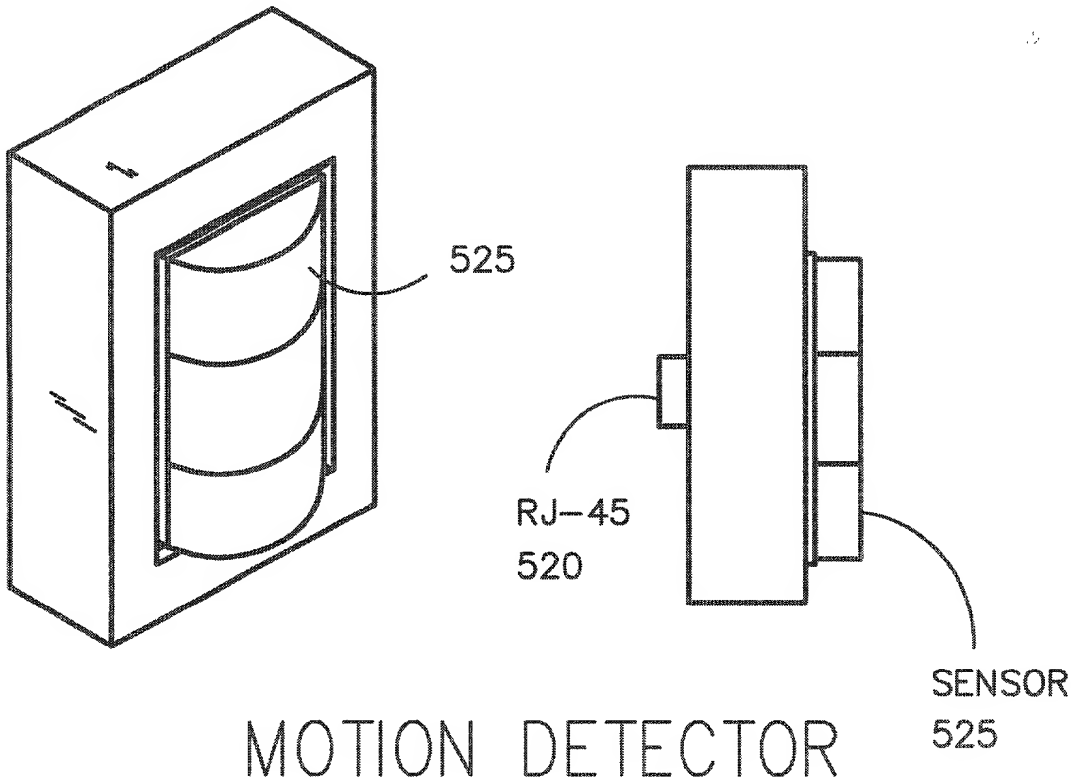

HUB OR SWITCH
805
815
825
PERIPHERAL DEVICE
TX
RX
PHY
PHY
835
800
810
820
830
845
840
850
860
855
REGULATOR
UNUSED PAIRS
865

FIG. 11



MOTION DETECTOR

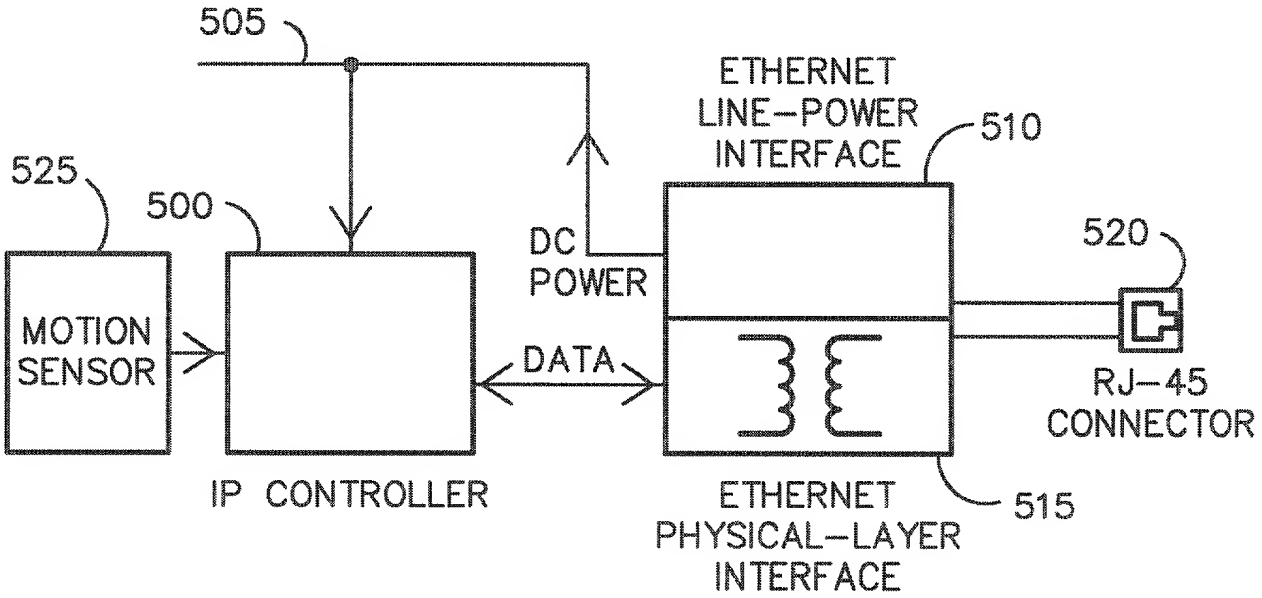
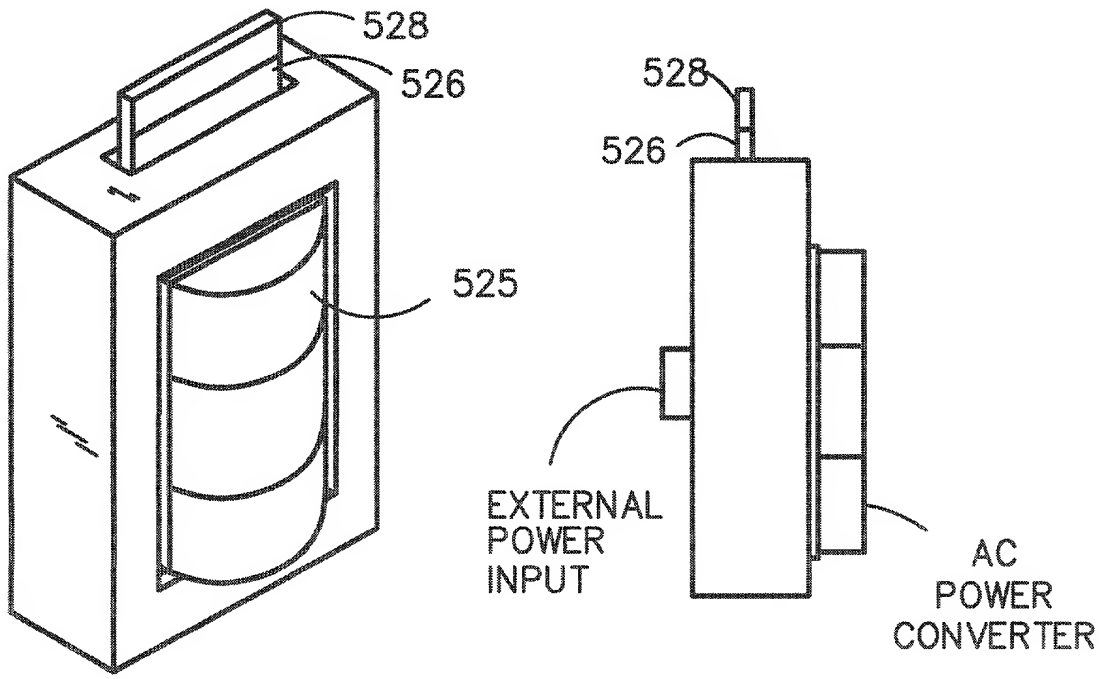


FIG. 12



MOTION DETECTOR

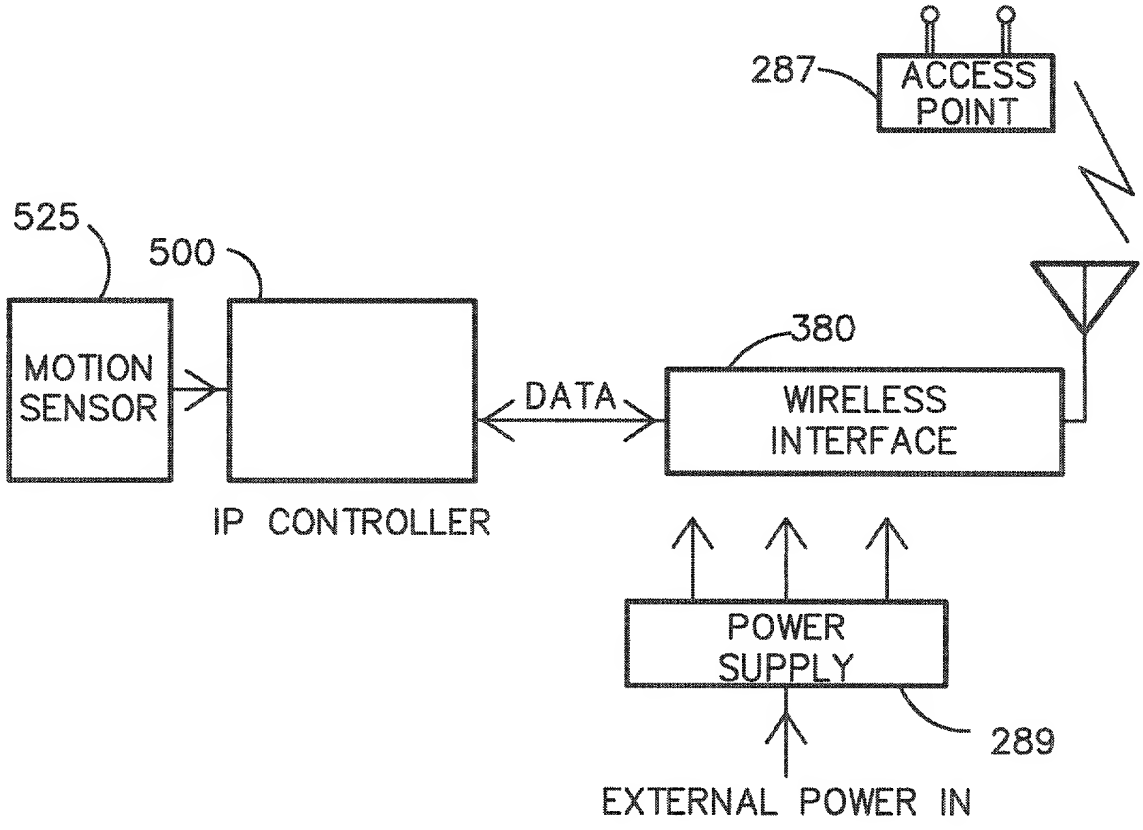
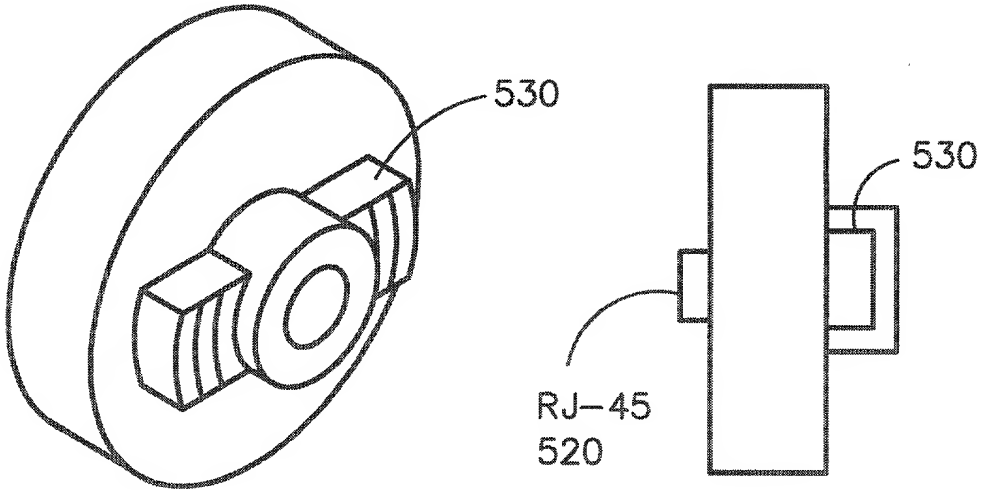


FIG. 12A



SMOKE DETECTOR OR
SMOKE & TEMP DETECTOR

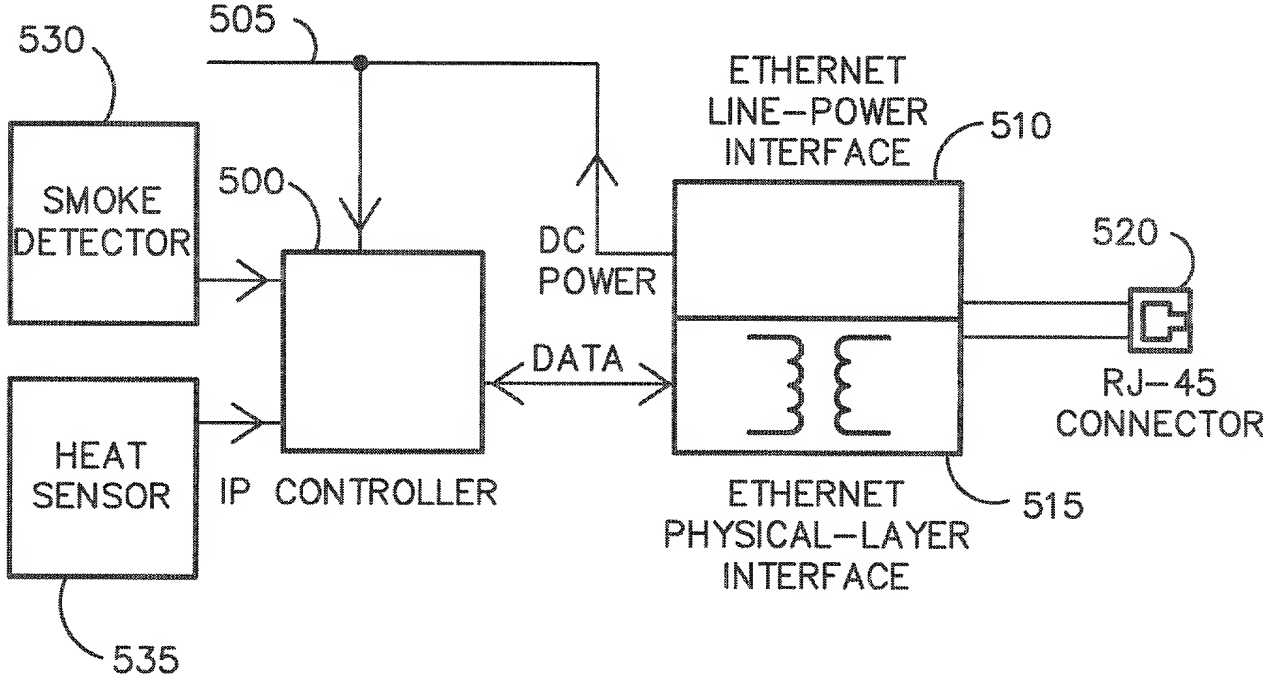
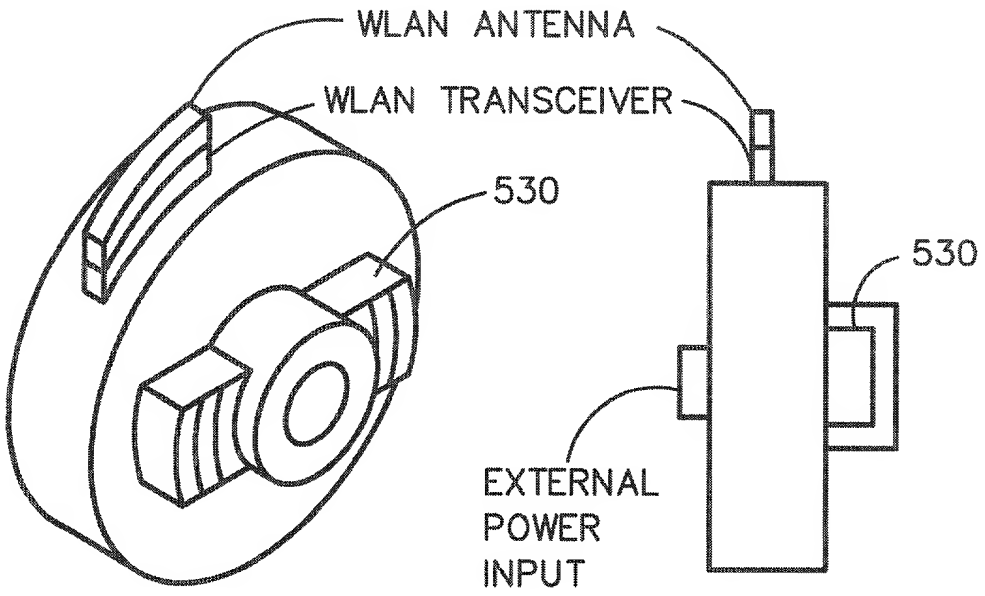


FIG. 13



SMOKE DETECTOR OR
SMOKE & TEMP DETECTOR

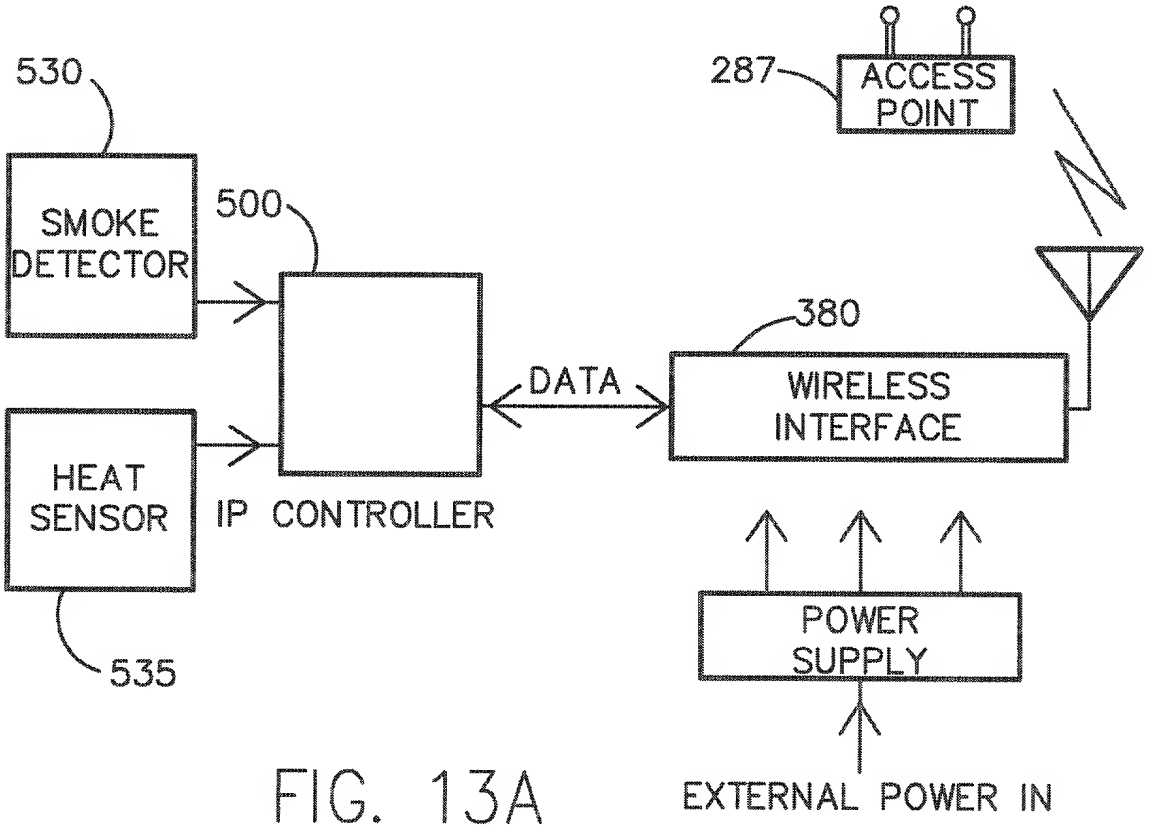
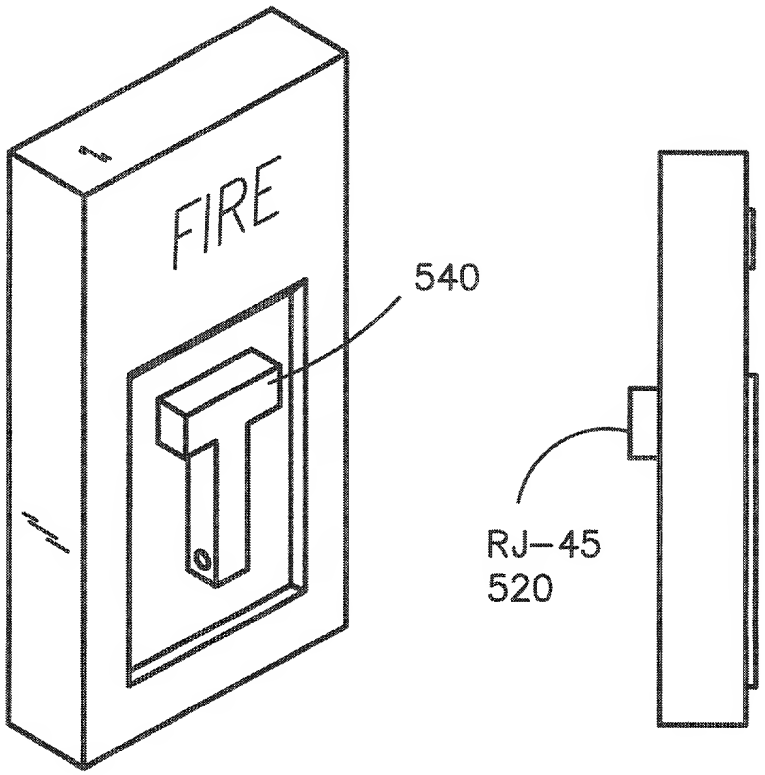


FIG. 13A

Docket No. 0696-1500



PULL HANDLE

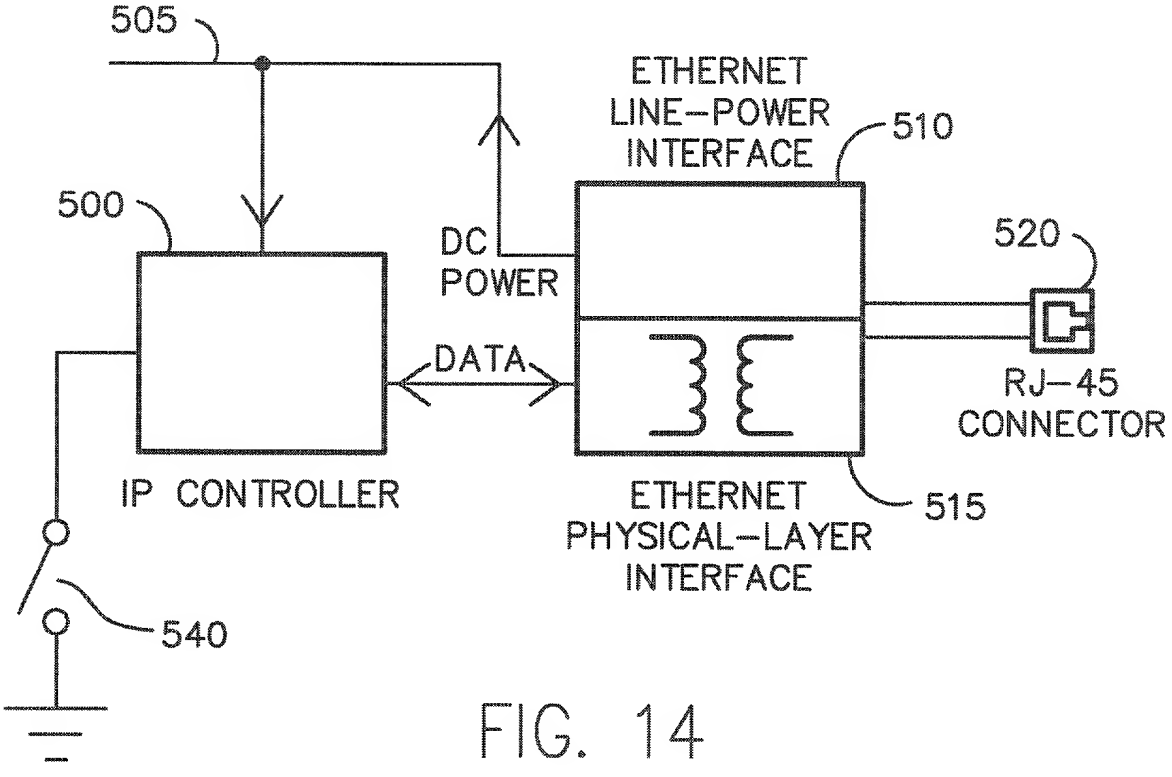
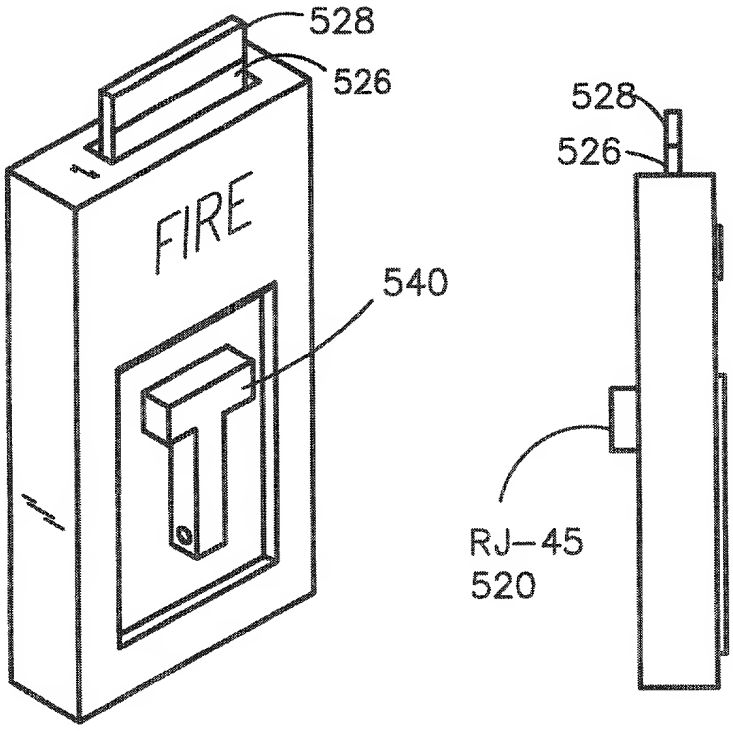


FIG. 14

US 9,565,430 B2



PULL HANDLE

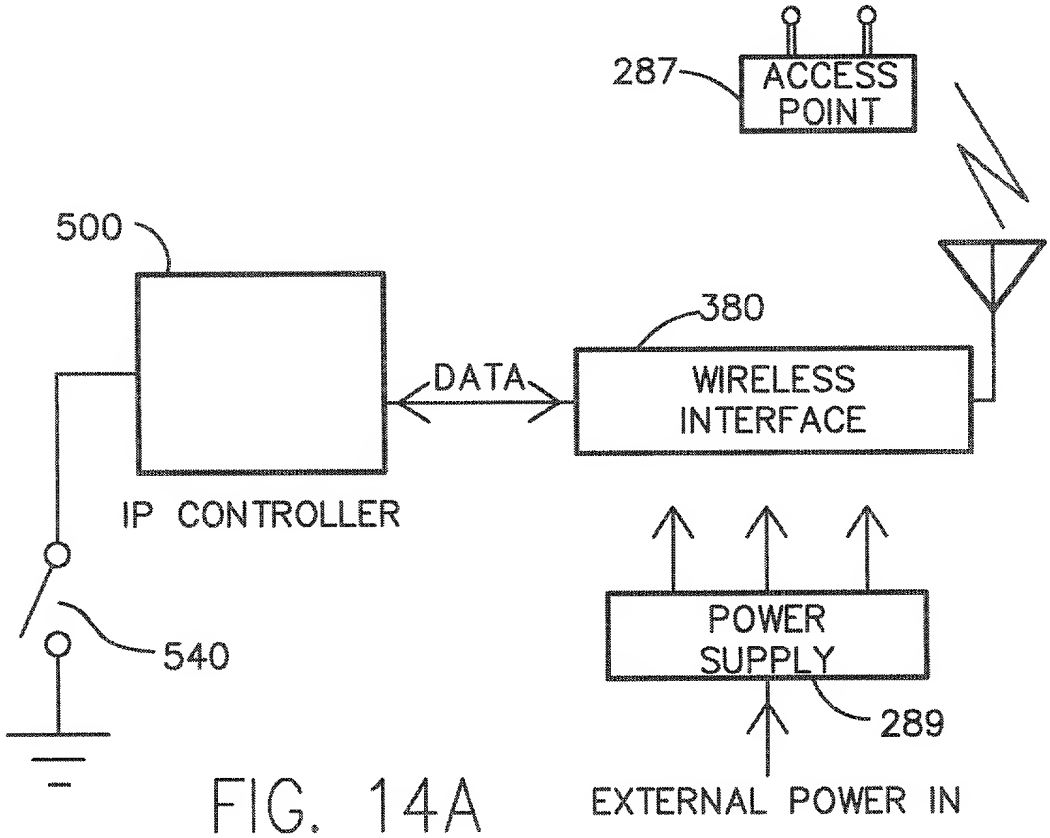
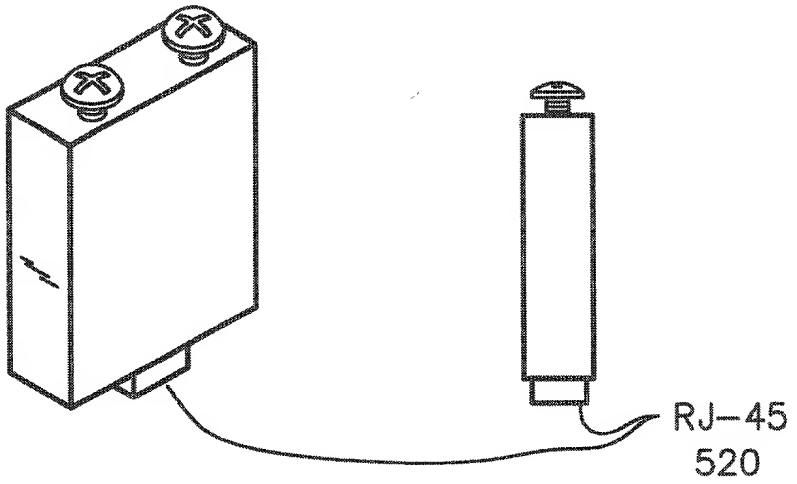
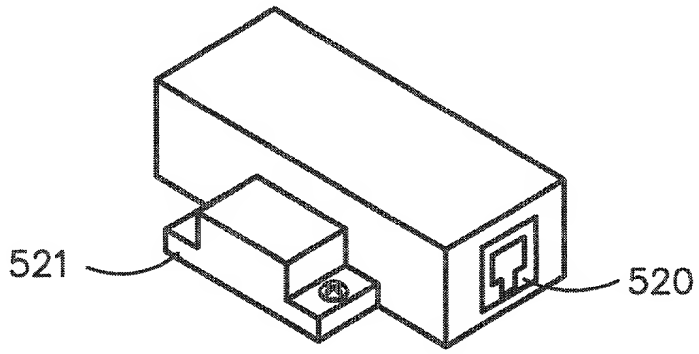


FIG. 14A



EXTERNAL CONTACT INTERFACE



INTERNAL CONTACT INTERFACE

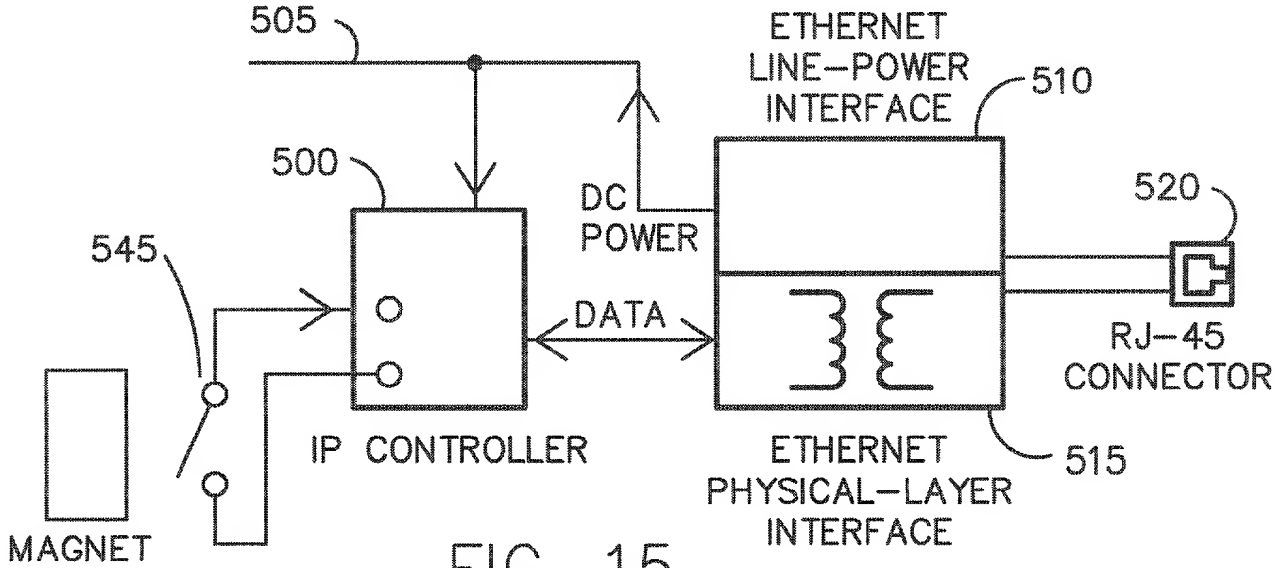
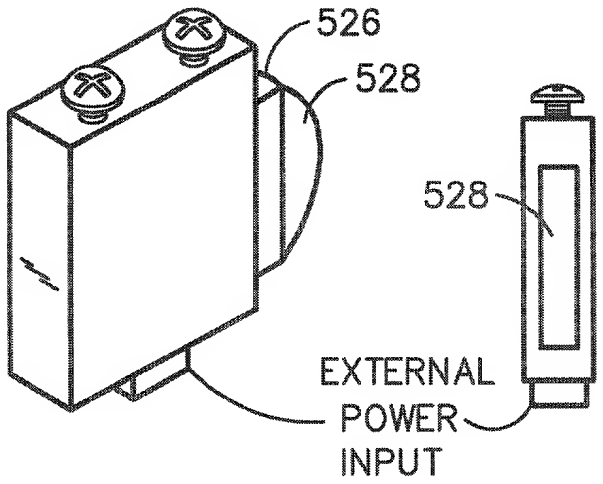
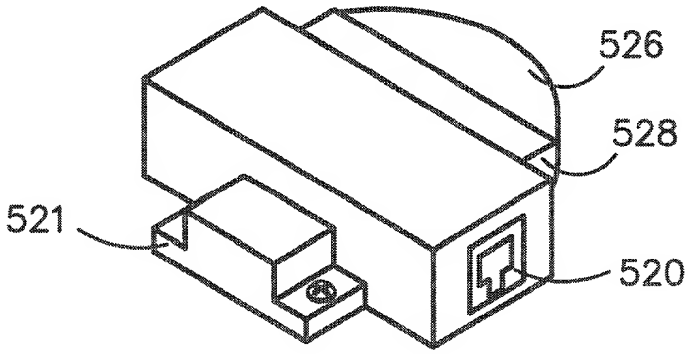


FIG. 15

9956520 - 040802



EXTERNAL CONTACT INTERFACE



INTERNAL CONTACT INTERFACE

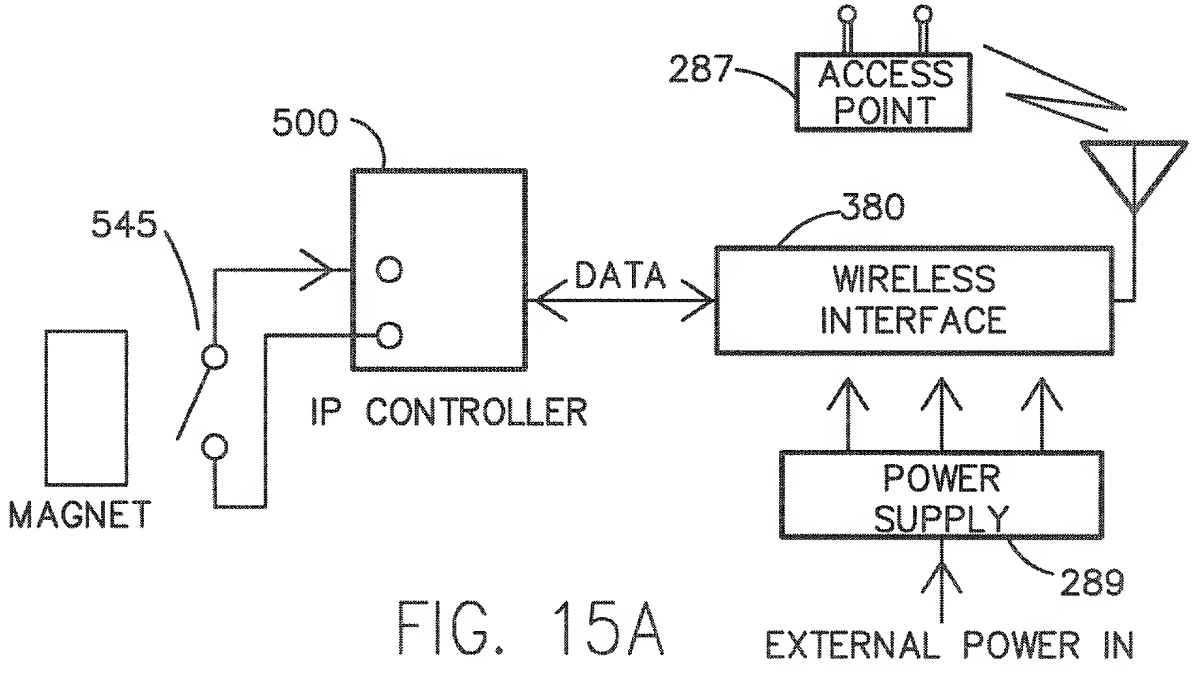
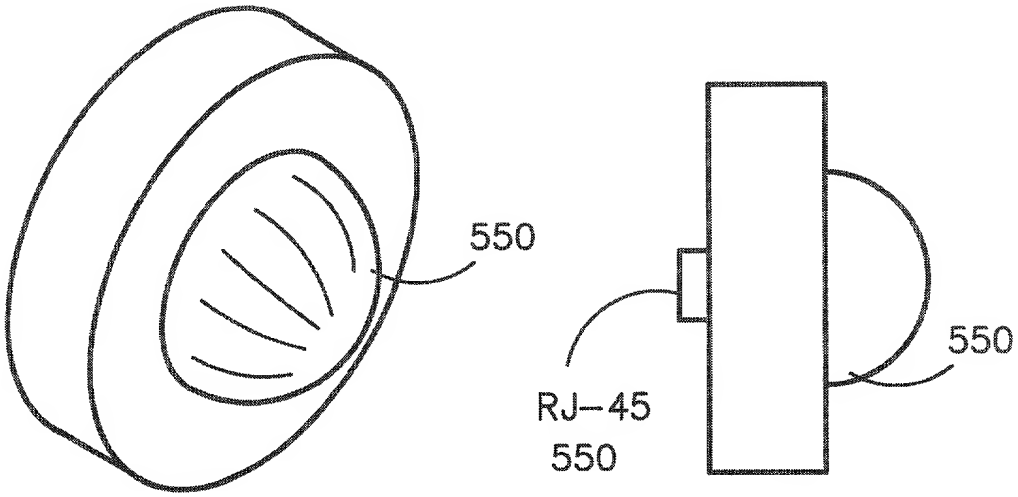


FIG. 15A

D596,150-0-0802



HEAT SENSOR

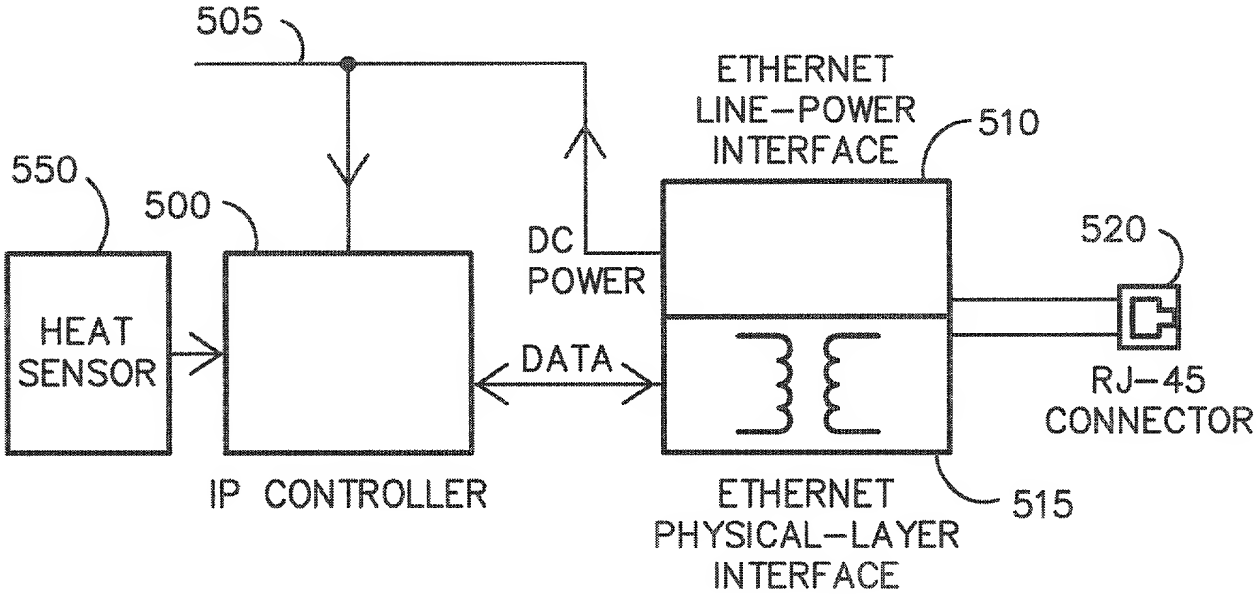
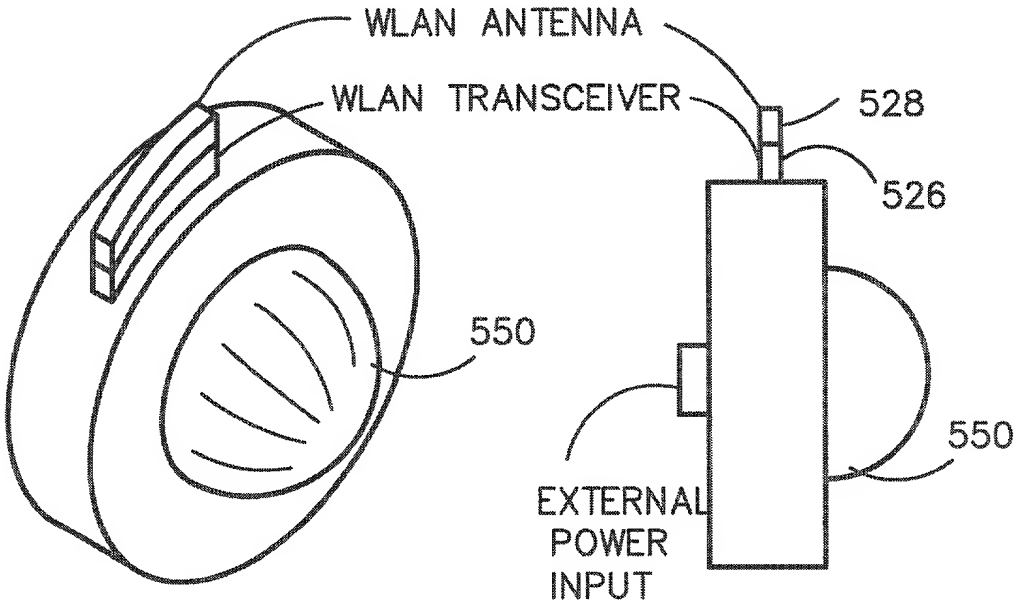


FIG. 16



HEAT SENSOR

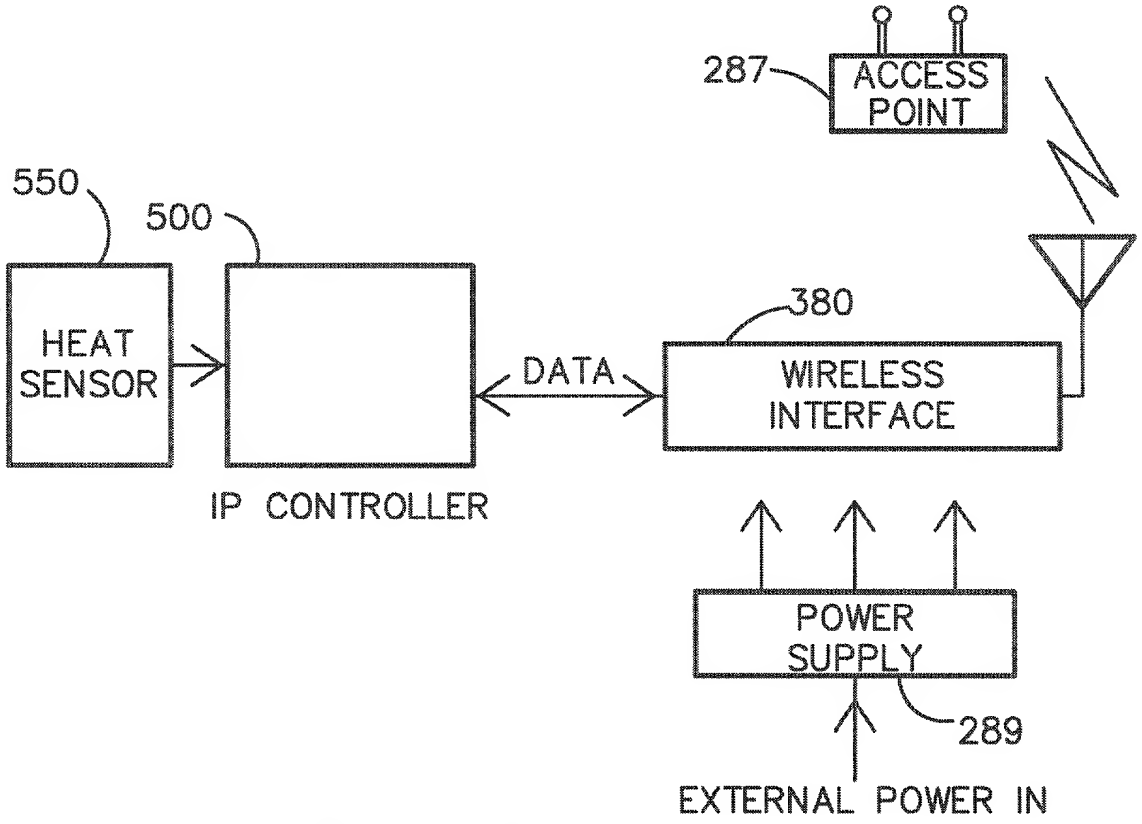
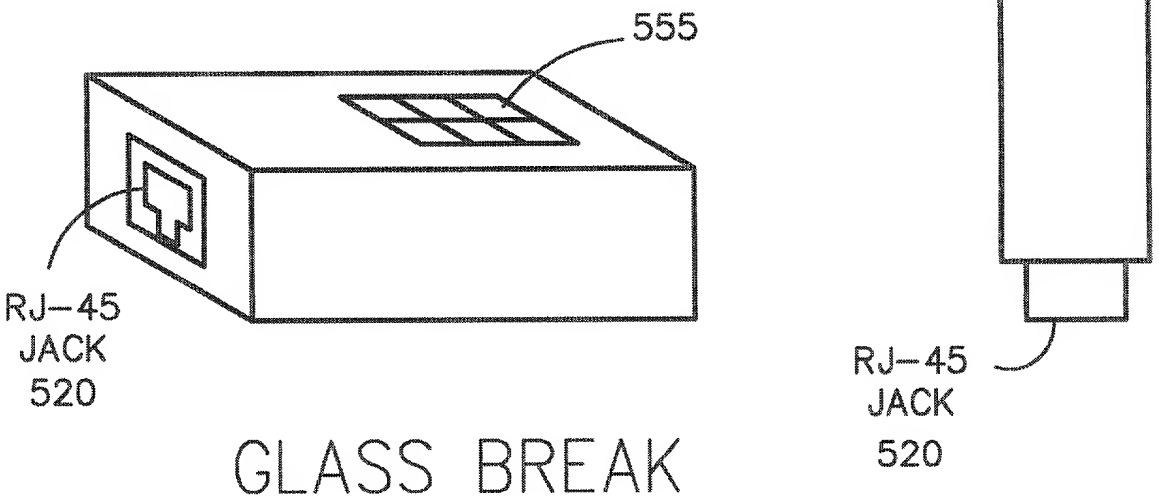


FIG. 16A

US 2005/0096753 A1



GLASS BREAK

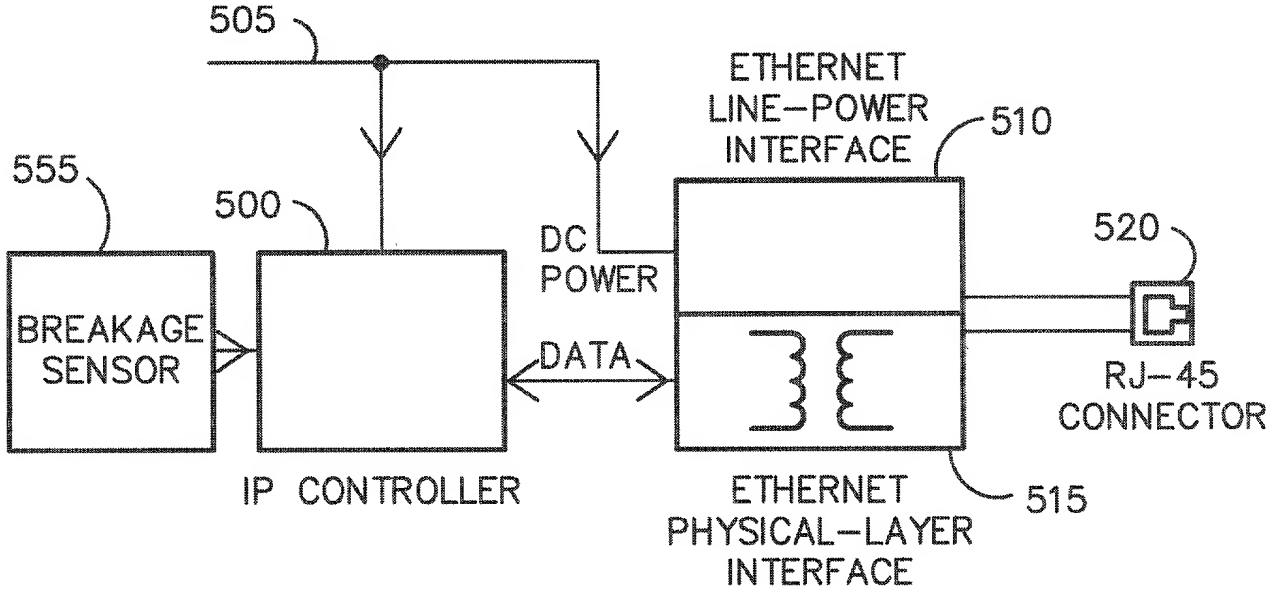
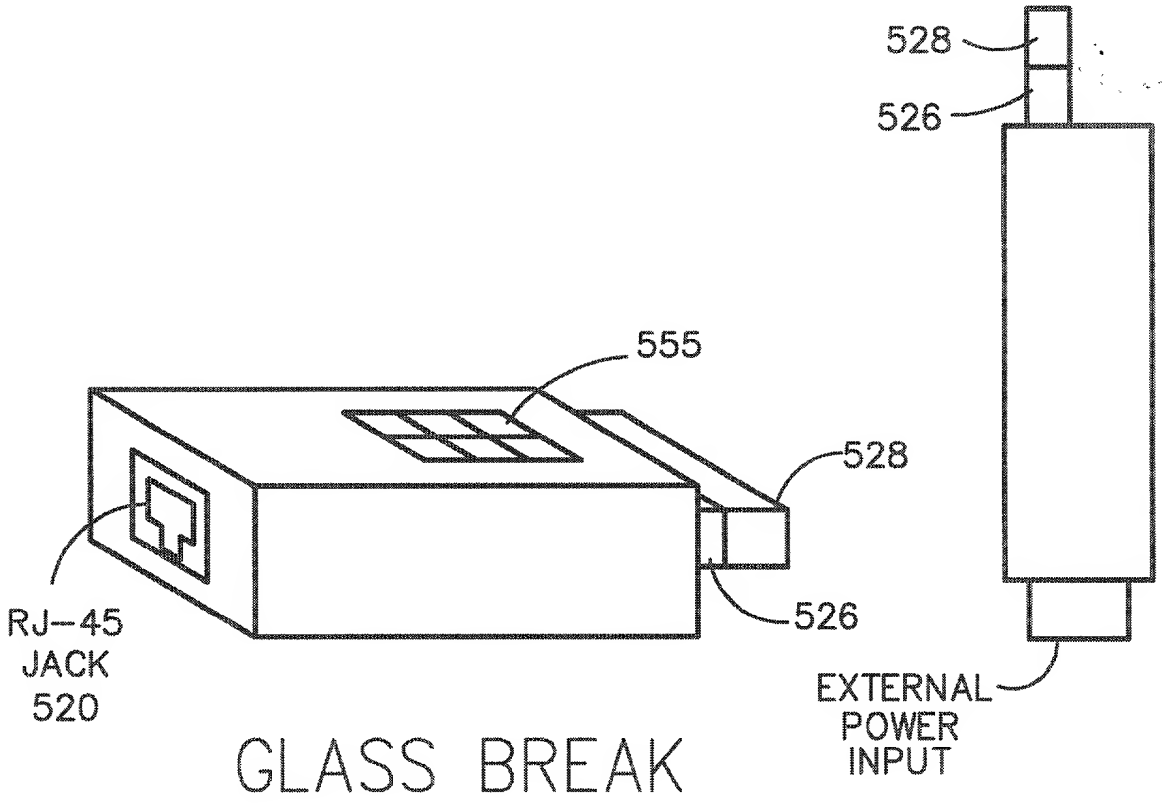


FIG. 17



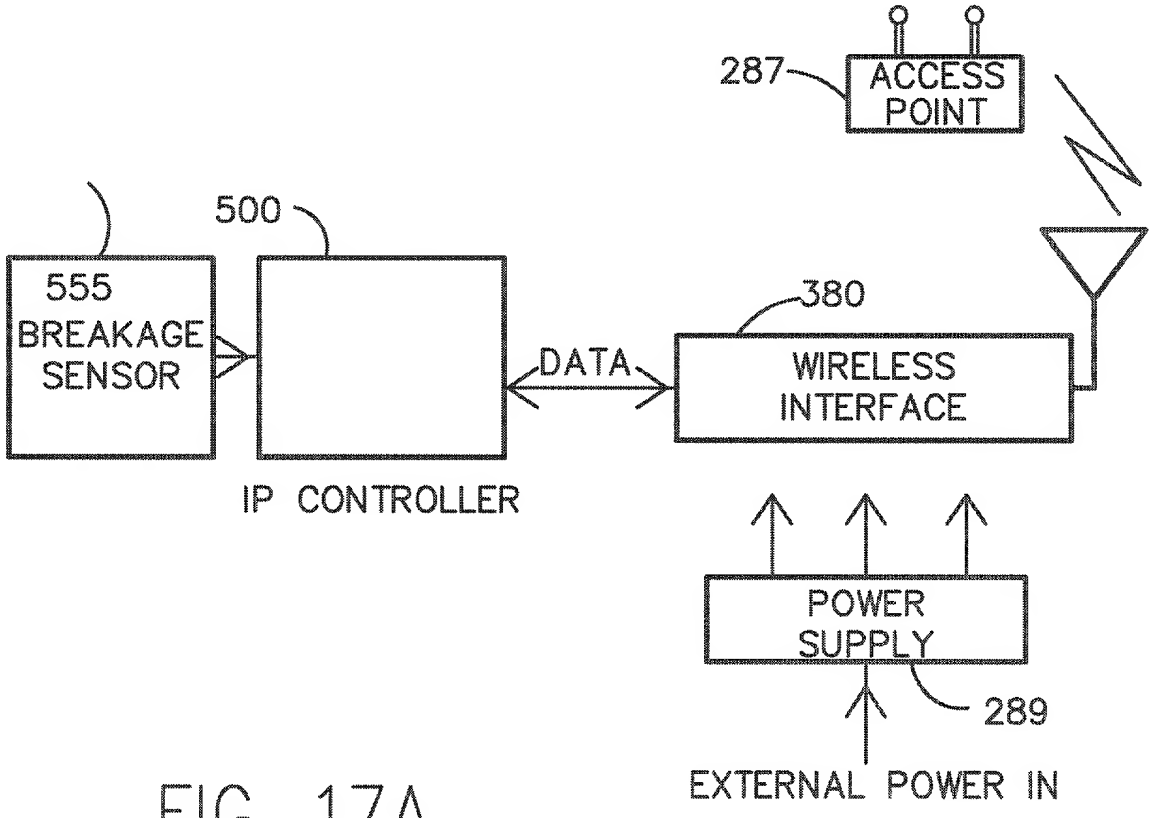
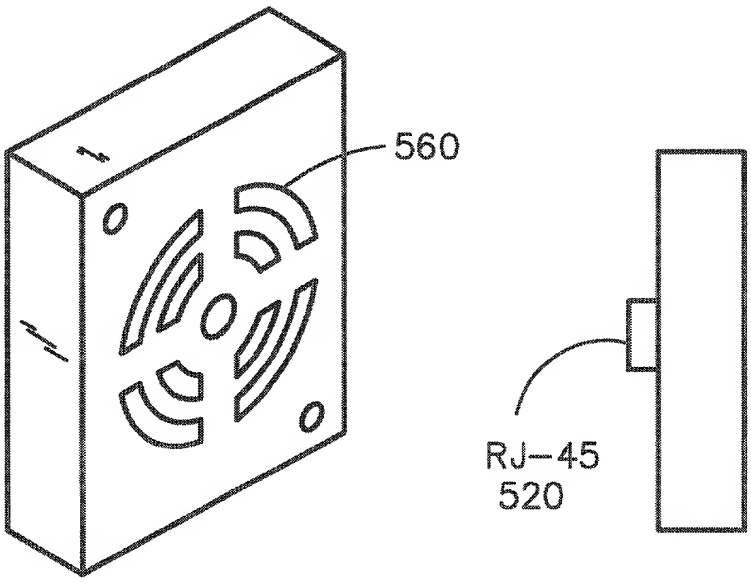


FIG. 17A

05656150 - 010802



SIREN

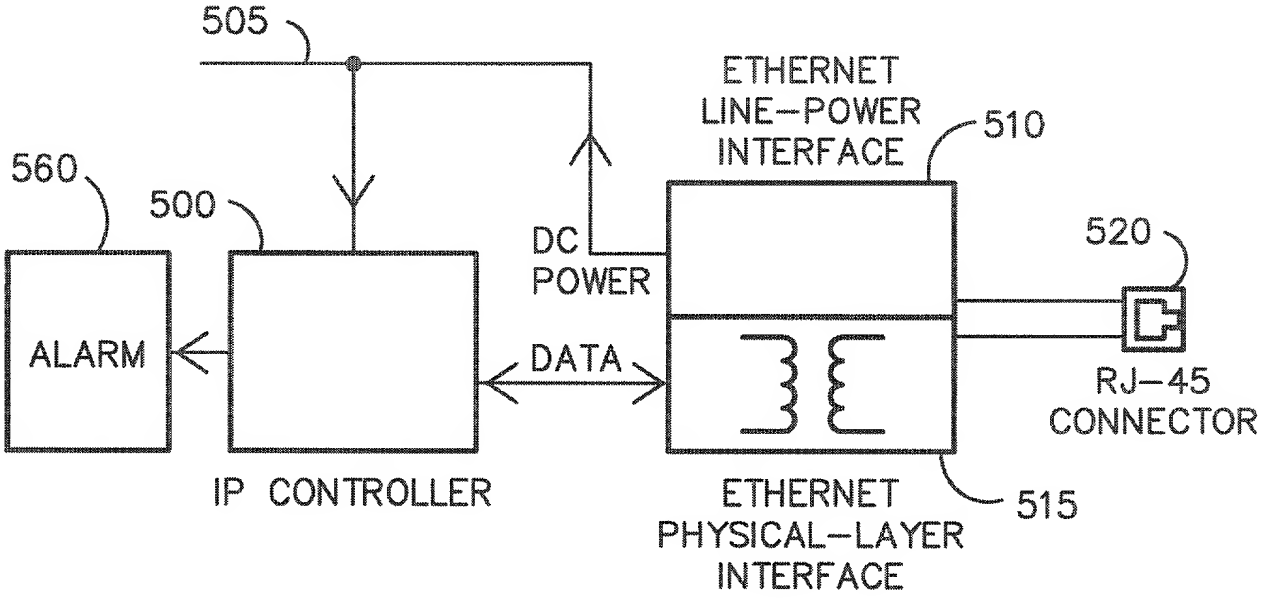
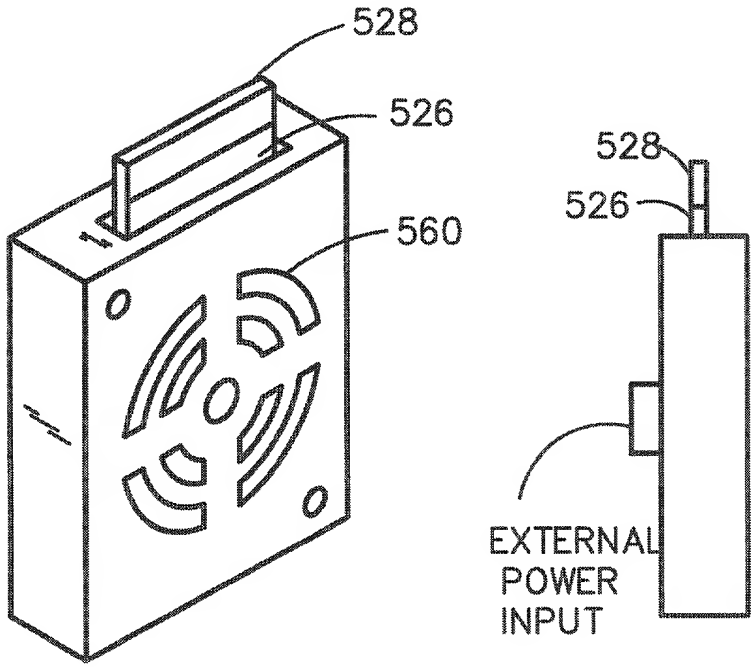


FIG. 18

05656450 - 04/08/02



SIREN

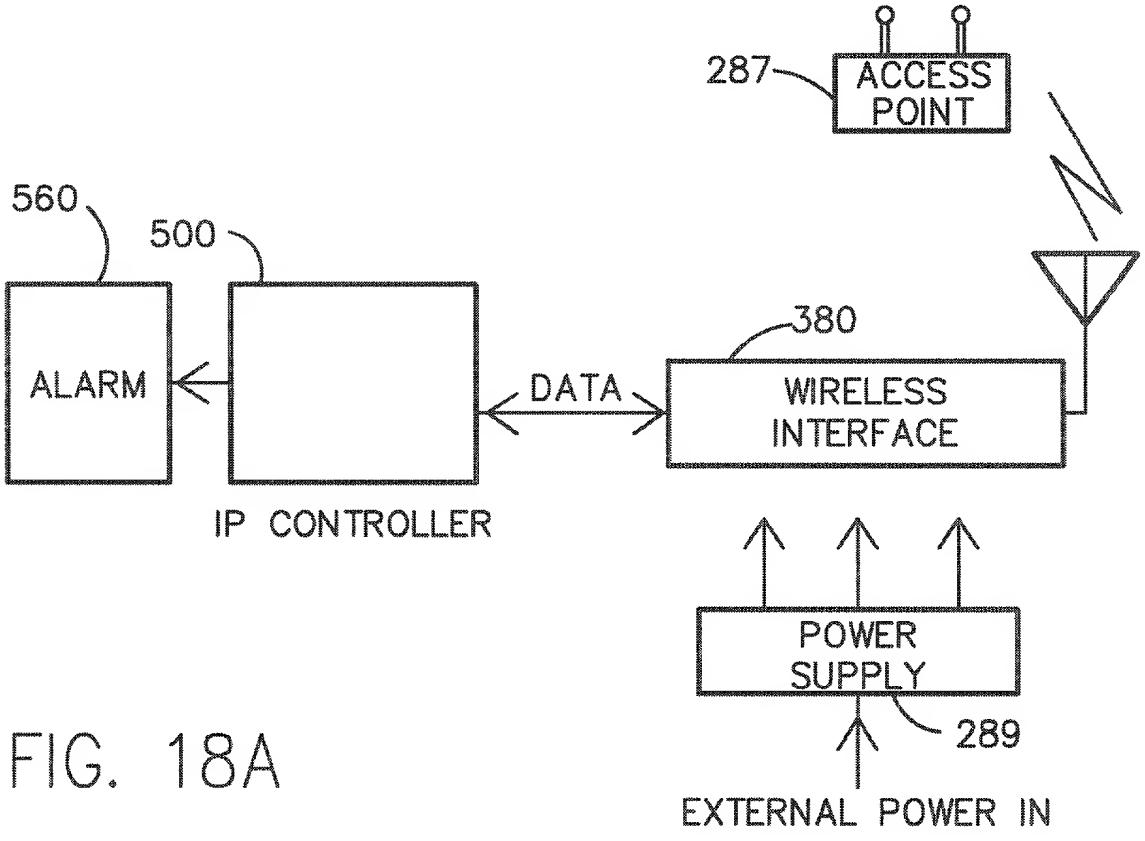
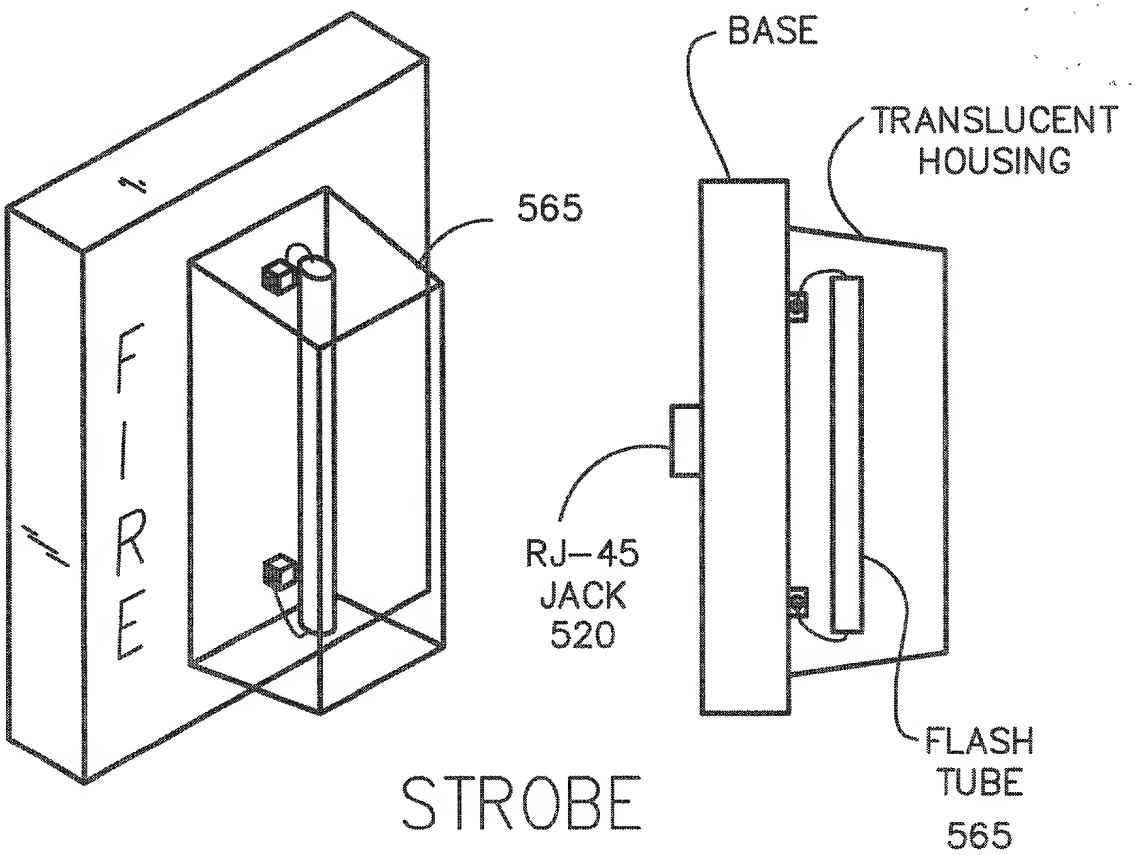


FIG. 18A


FIRE
565
BASE
TRANSLUCENT HOUSING
RJ-45 JACK 520
FLASH TUBE 565
STROBE

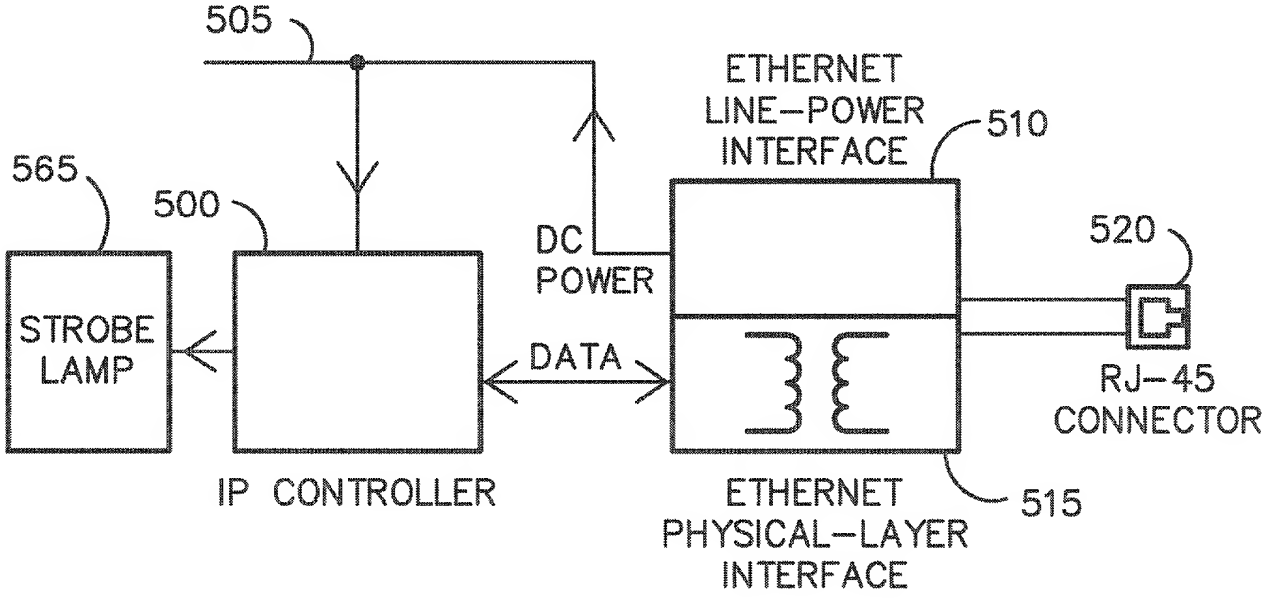
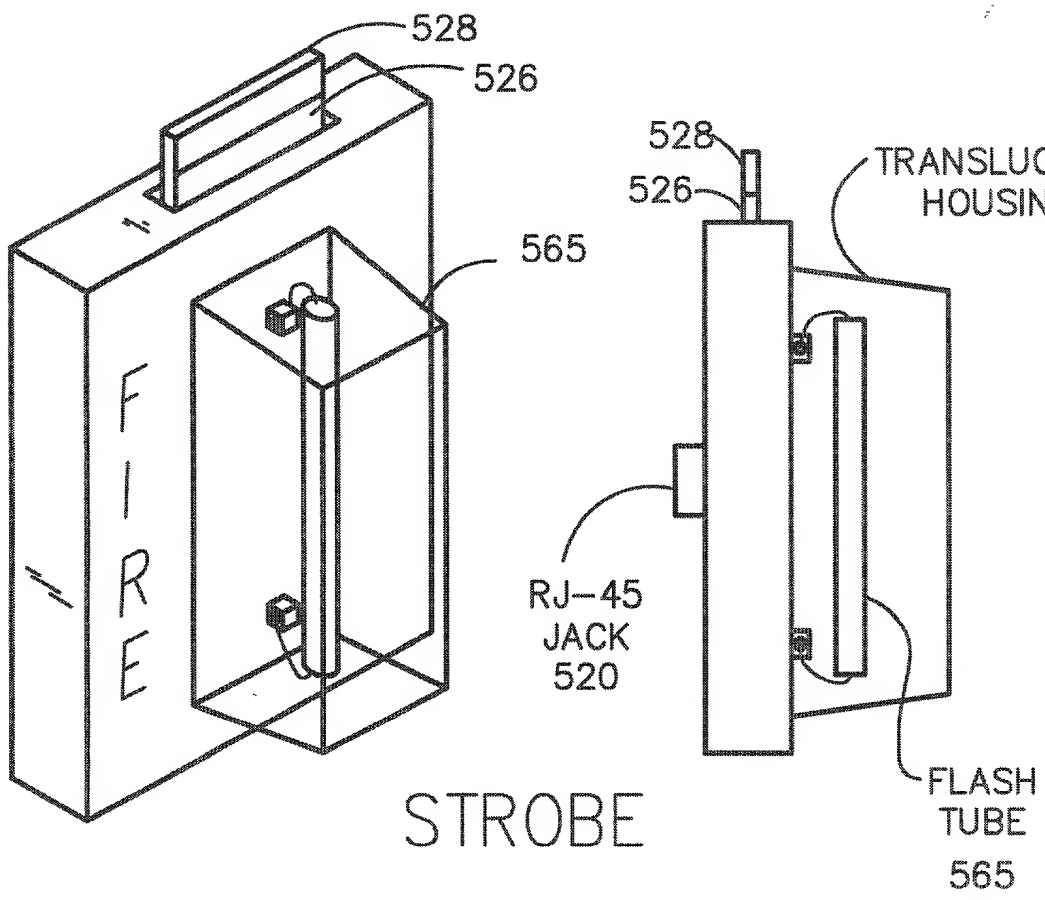

505
ETHERNET LINE-POWER INTERFACE
510
565
500
520
DC POWER
STROBE LAMP
DATA
RJ-45 CONNECTOR
IP CONTROLLER
ETHERNET PHYSICAL-LAYER INTERFACE
515

FIG. 19


528
526
565
FIRE
528
526
TRANSLUCENT HOUSING
RJ-45 JACK 520
FLASH TUBE 565
STROBE

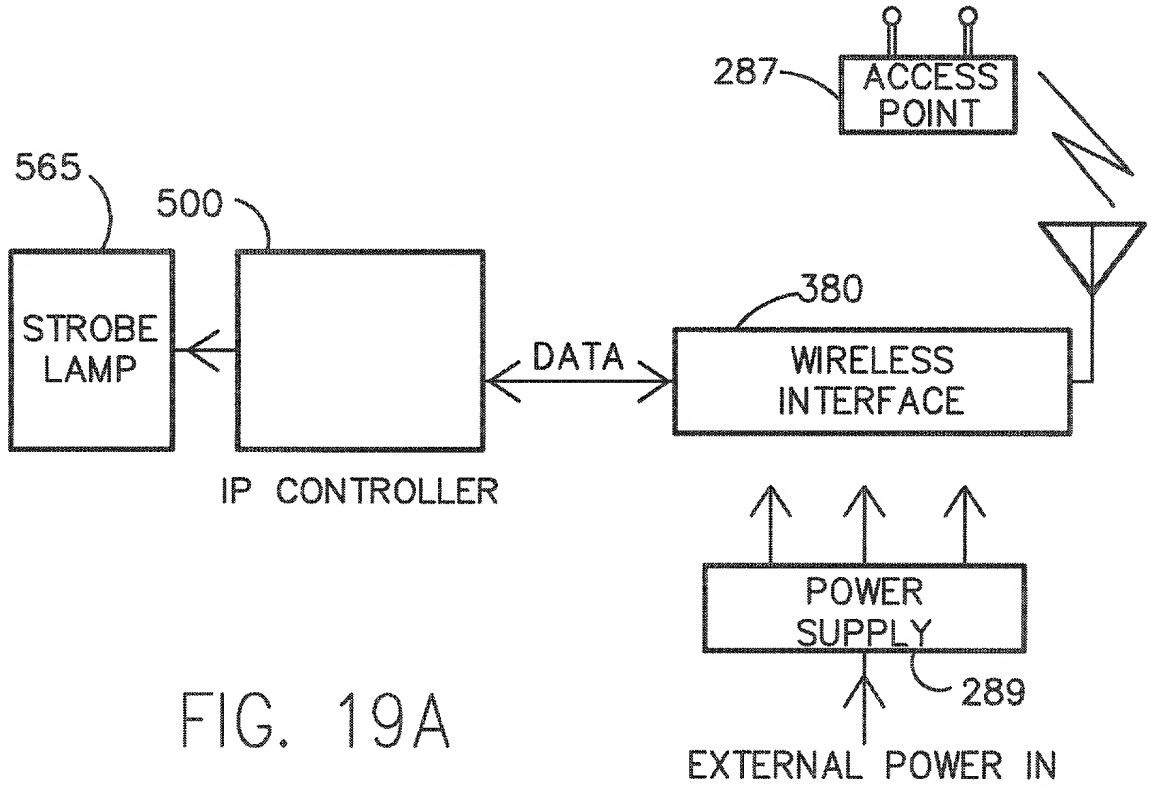
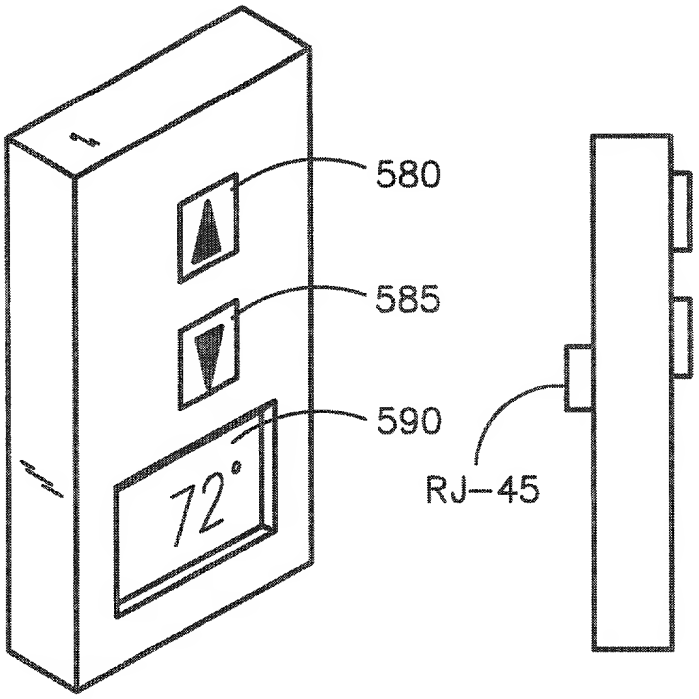

287
ACCESS POINT
565
500
STROBE LAMP
DATA
380
WIRELESS INTERFACE
IP CONTROLLER
POWER SUPPLY
289
EXTERNAL POWER IN

FIG. 19A



THERMOSTAT AND/OR HUMIDISTAT

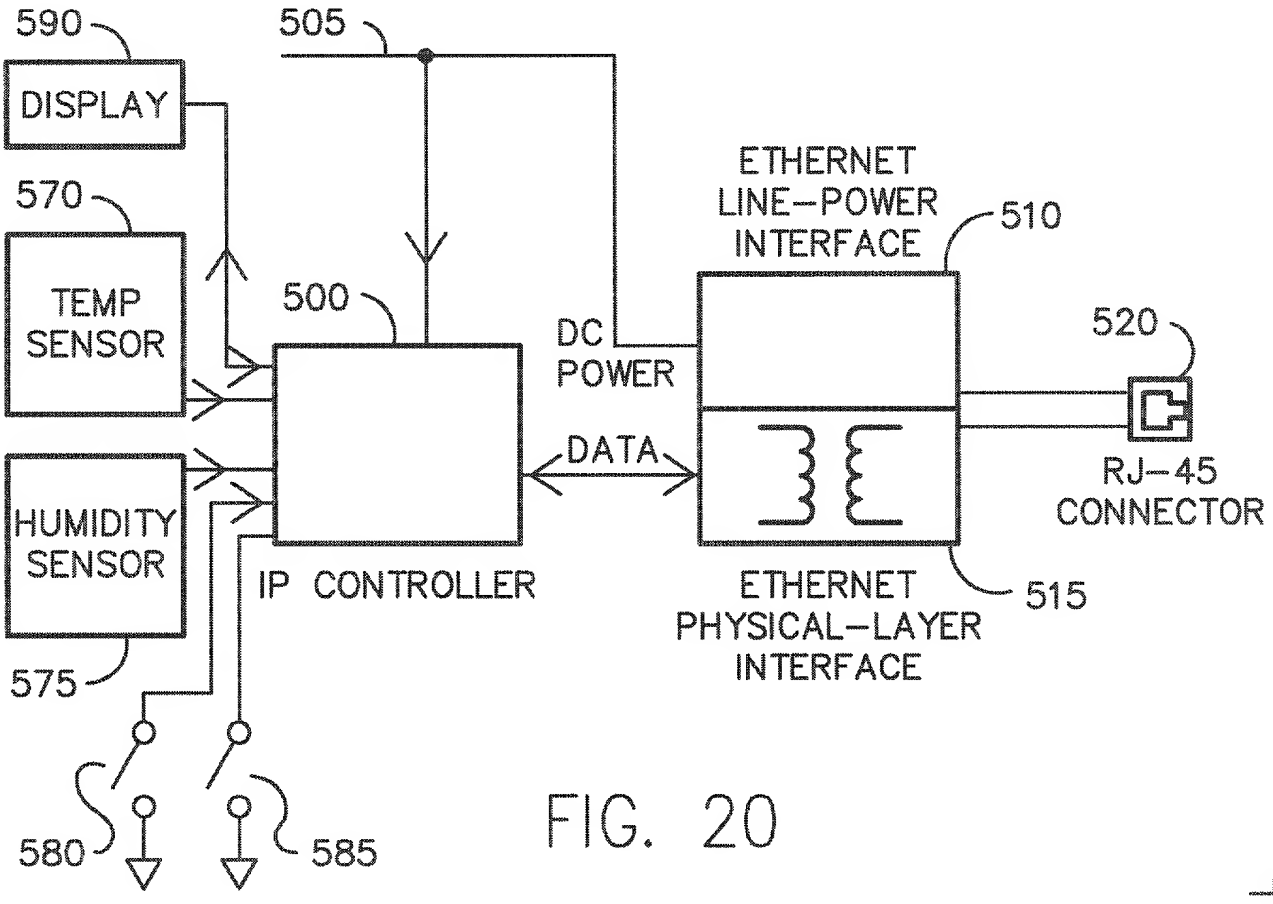
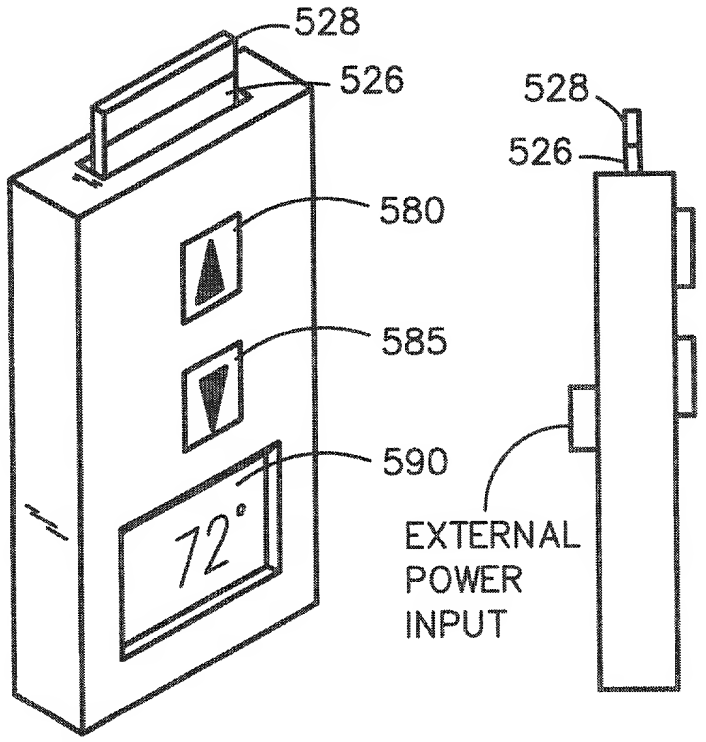


FIG. 20

0966130.01686



THERMOSTAT AND/OR HUMIDISTAT

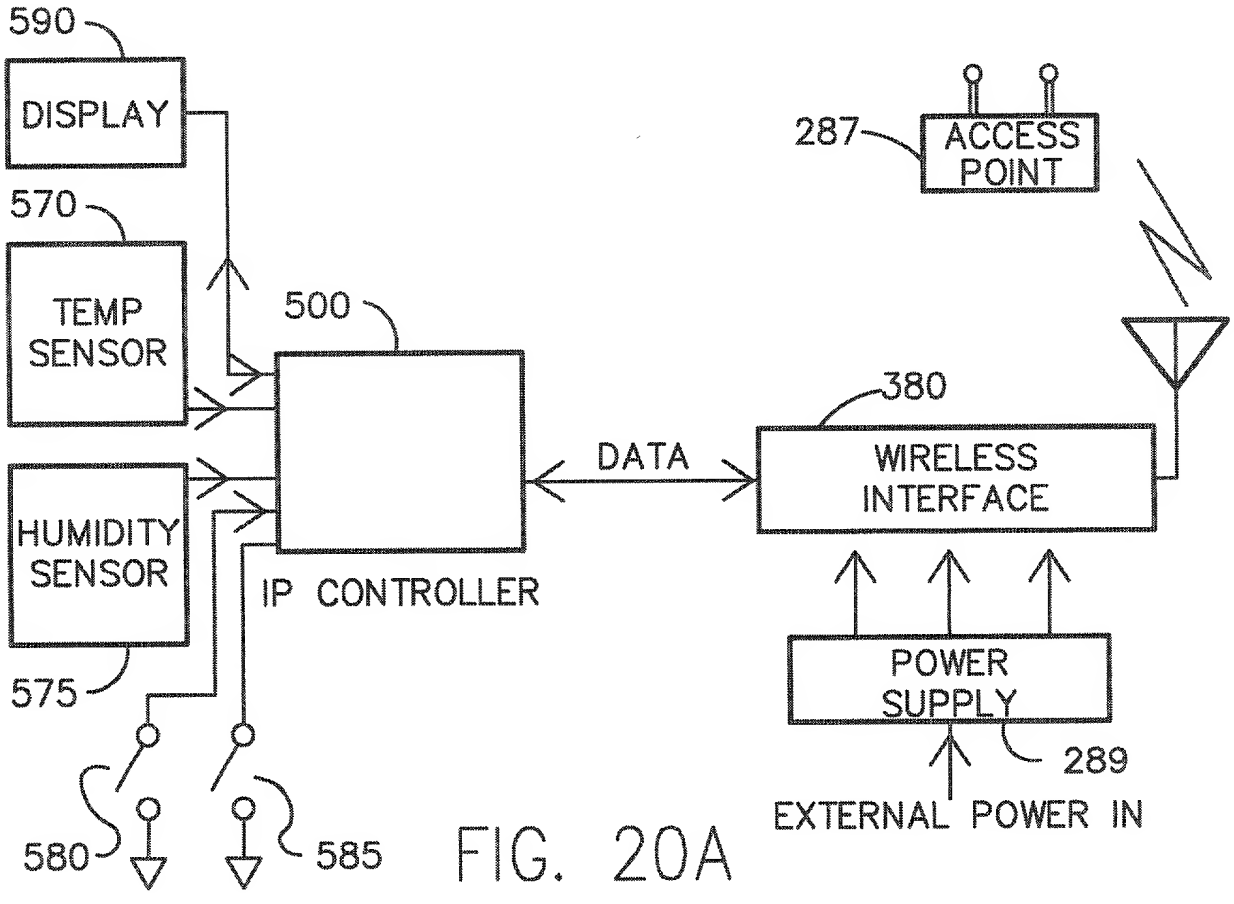
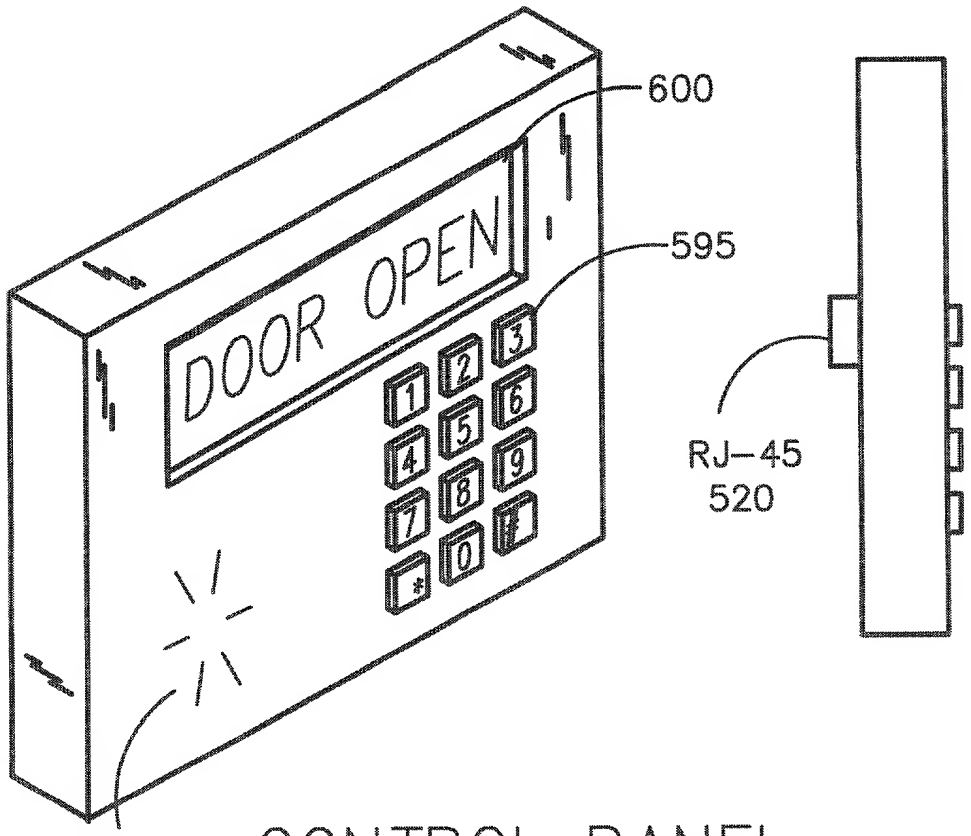


FIG. 20A

09956130 - 010902



CONTROL PANEL

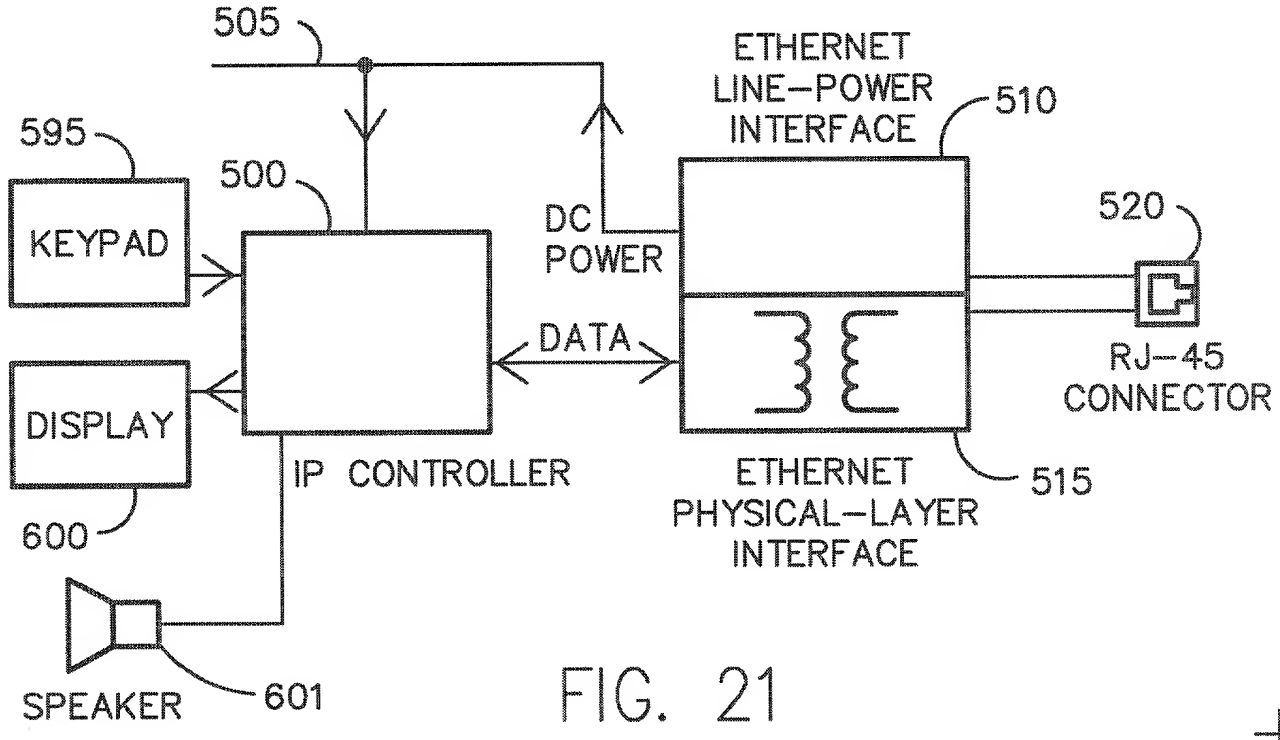
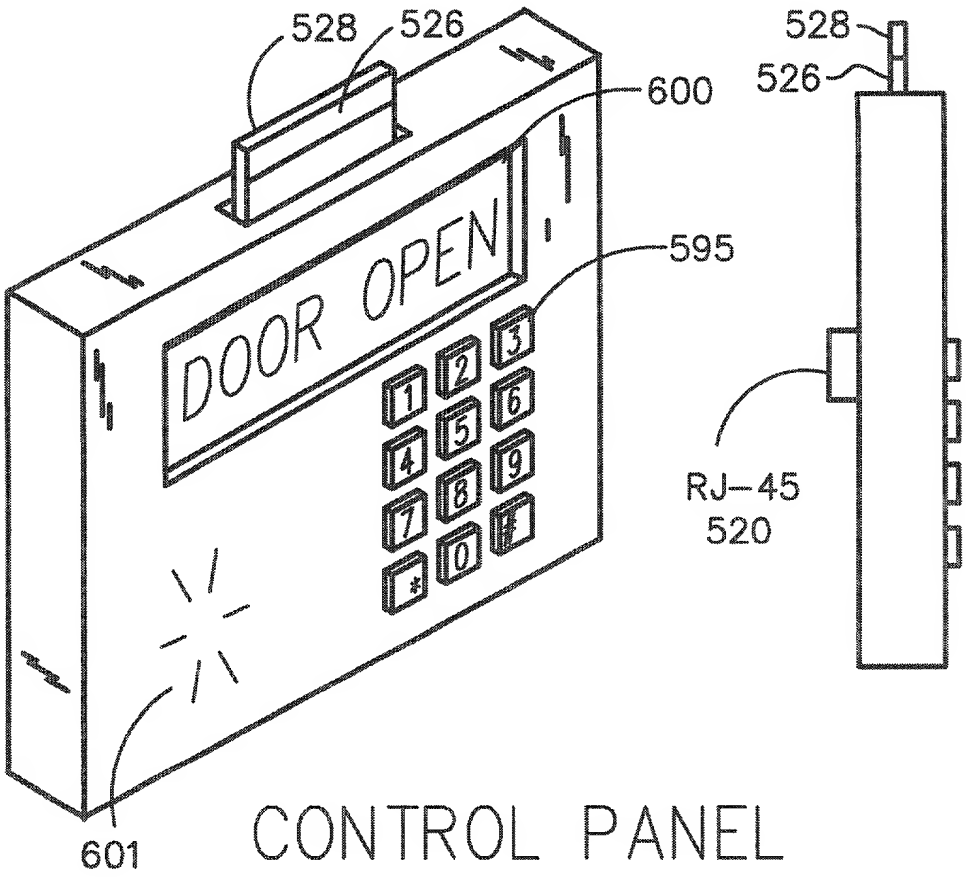


FIG. 21



CONTROL PANEL

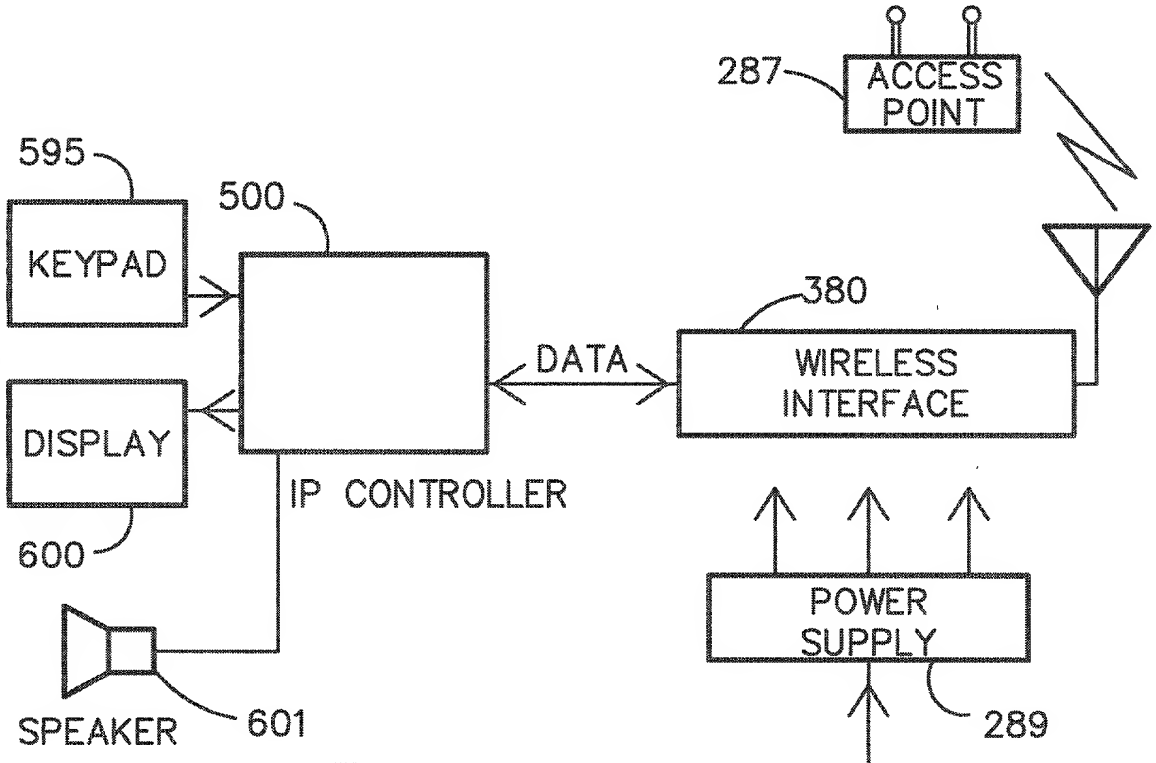
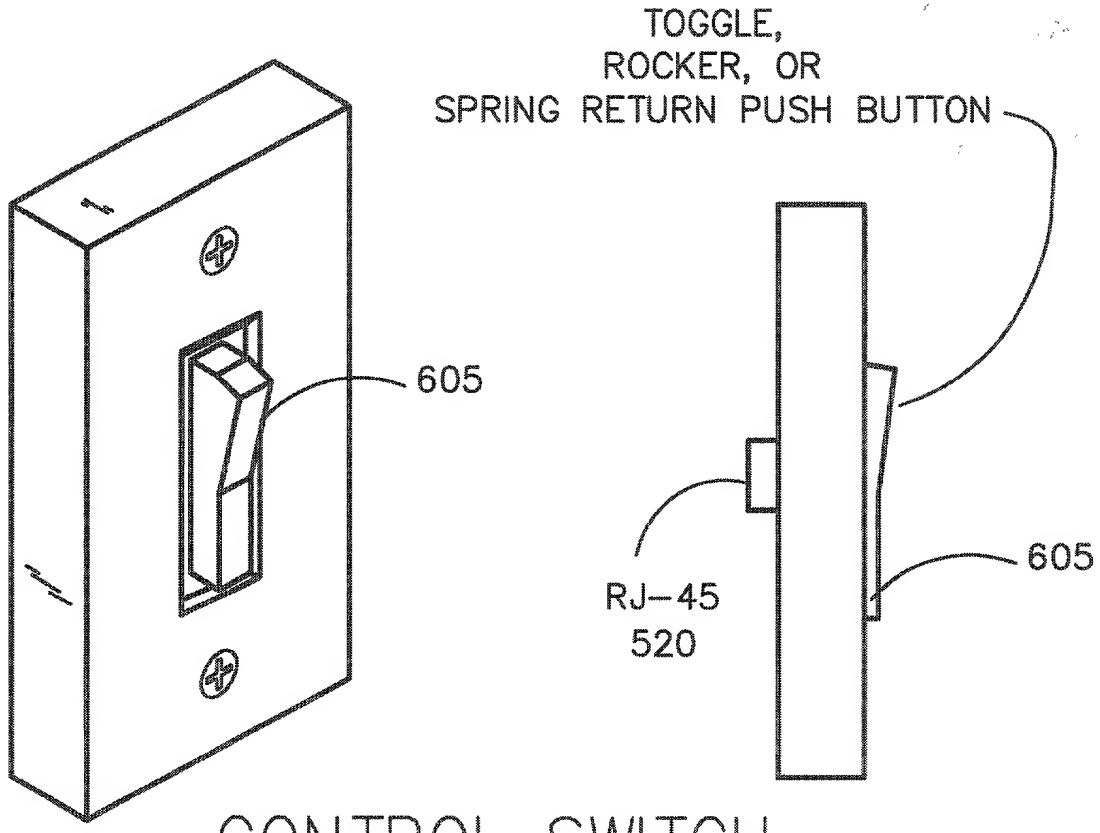


FIG. 21A

D9565130-070802



CONTROL SWITCH

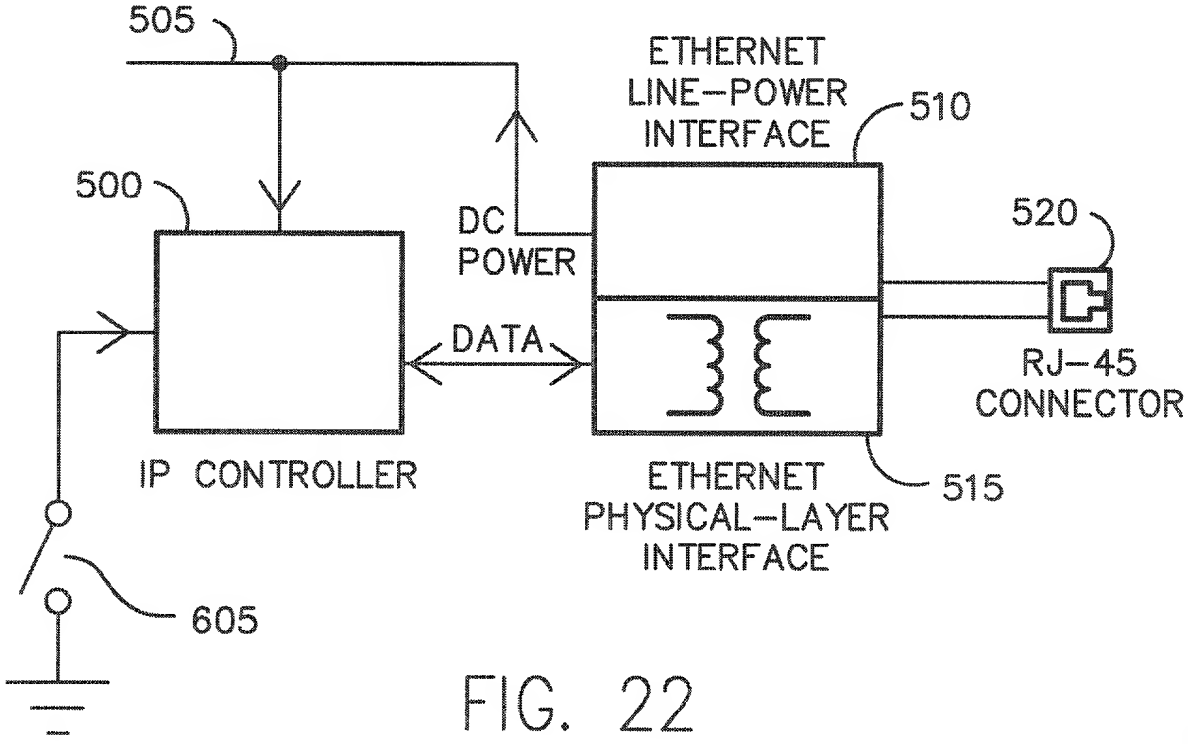
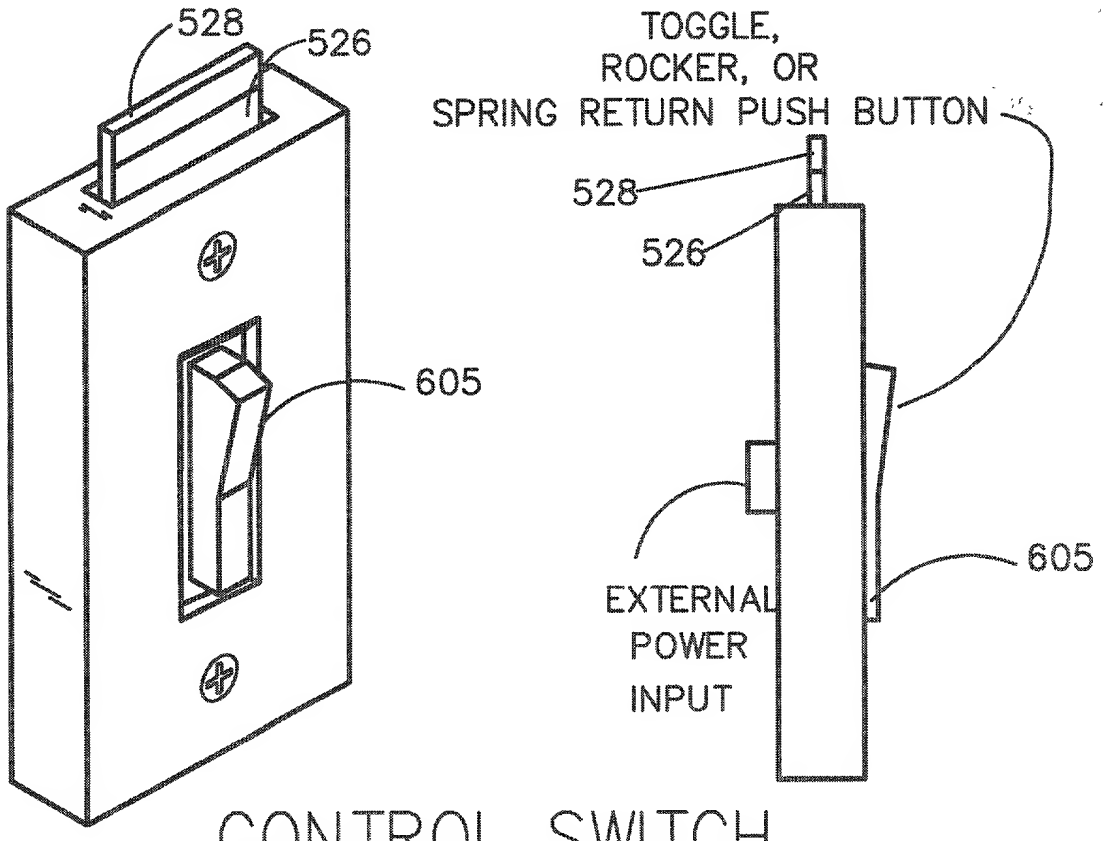


FIG. 22



CONTROL SWITCH

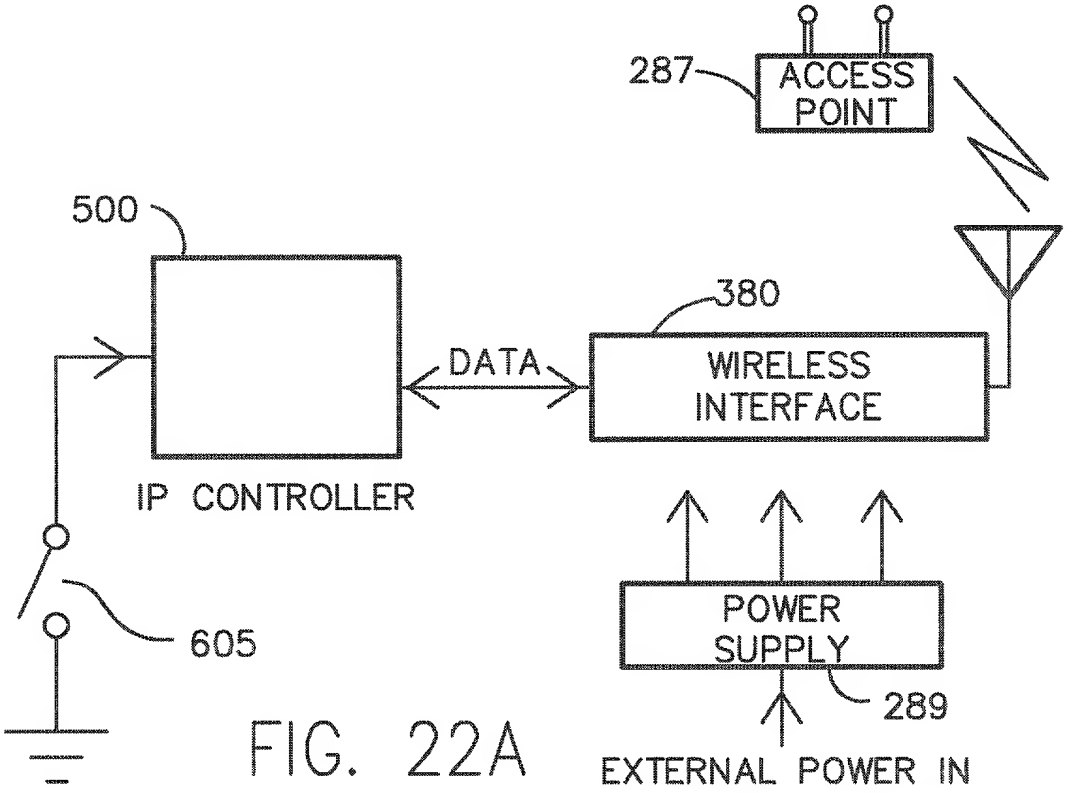
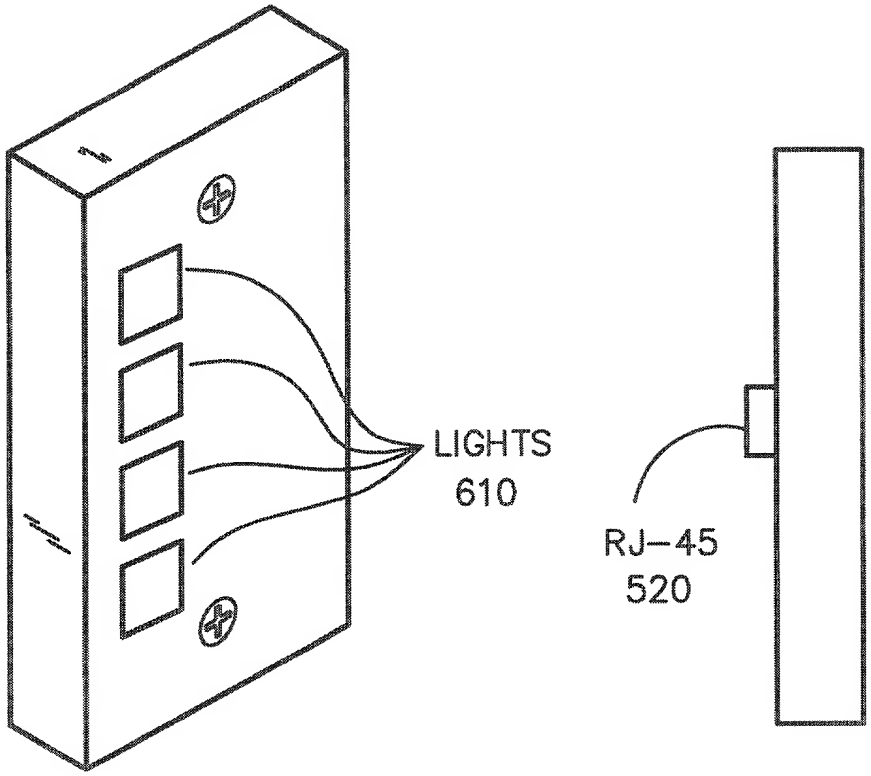


FIG. 22A

D596,809 · 08/08/2009



INDICATOR LIGHT

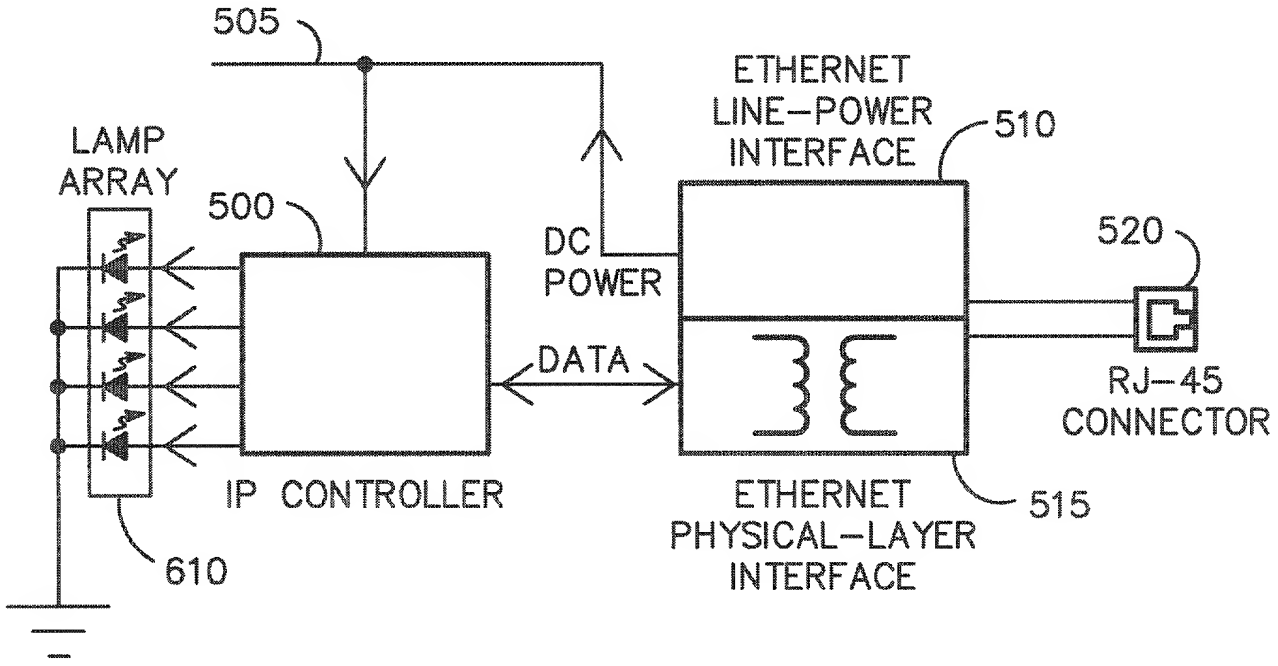
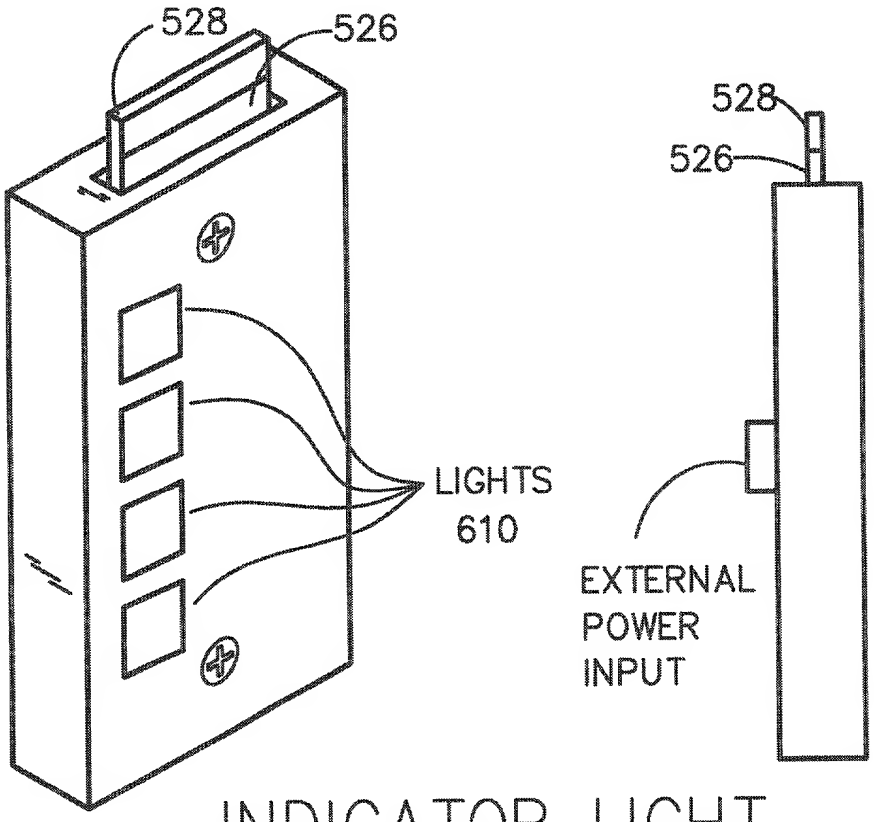


FIG. 23

US 9,955,551 B2



INDICATOR LIGHT

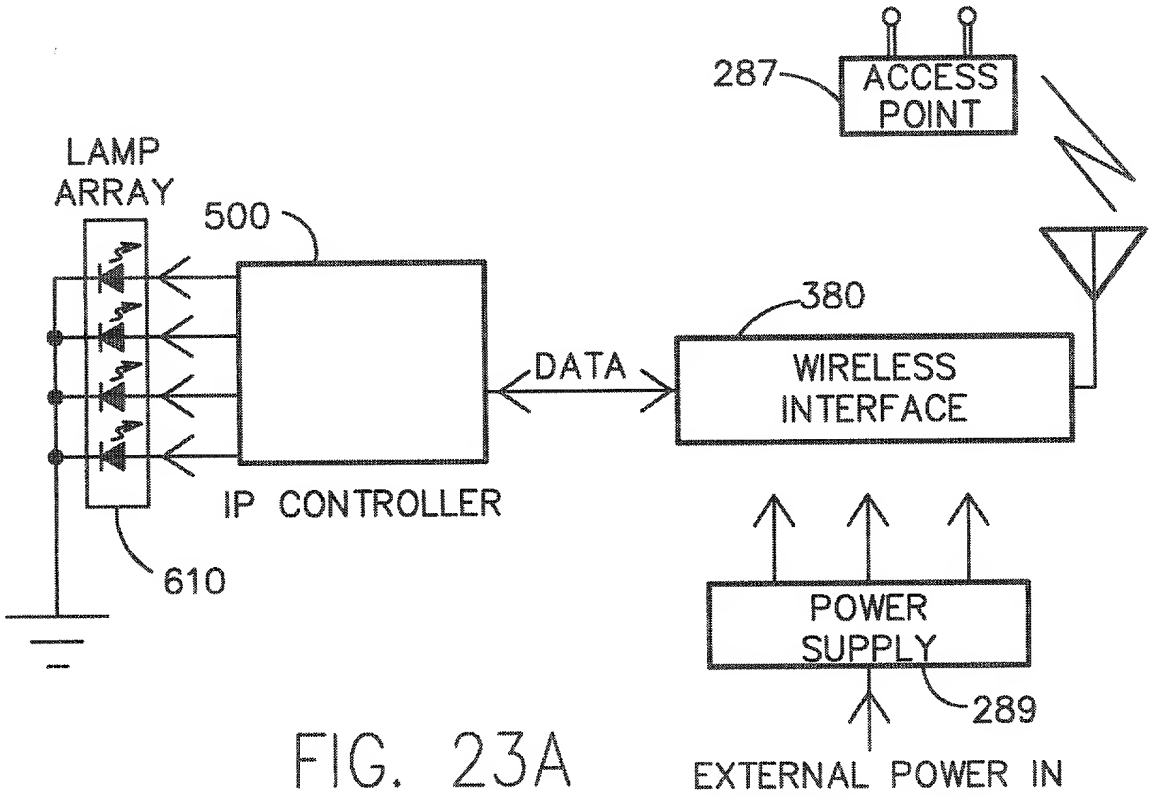
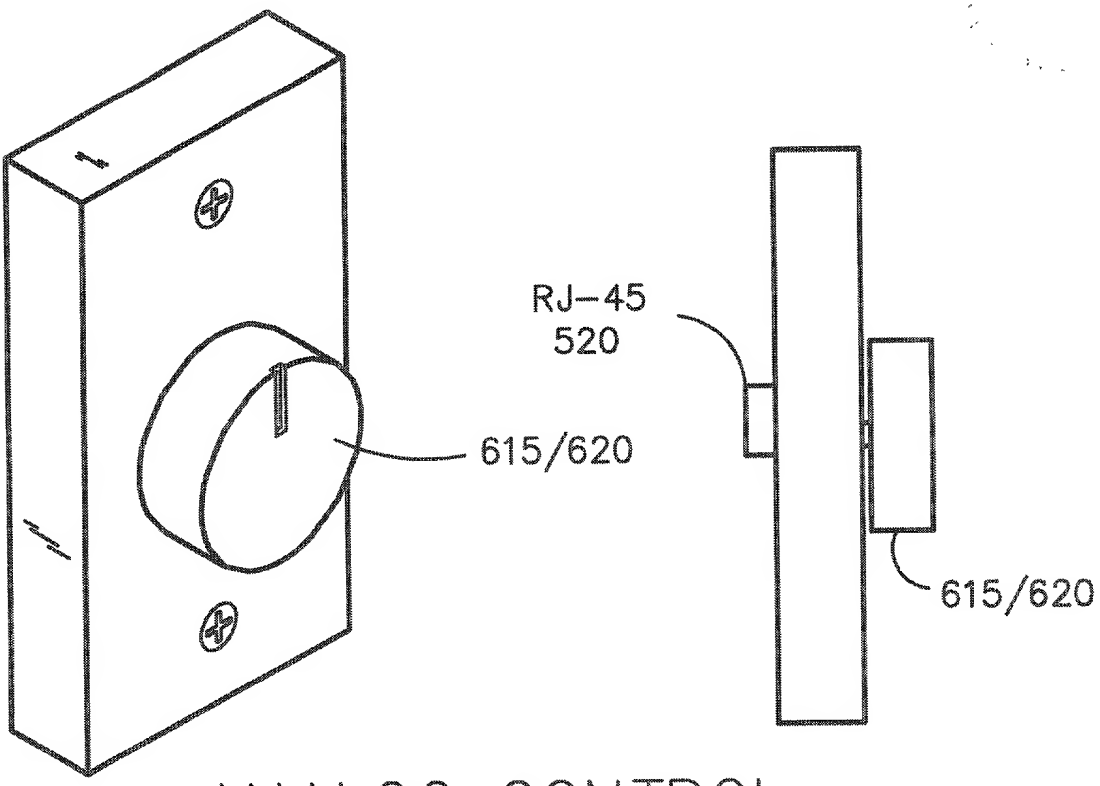


FIG. 23A



ANALOG CONTROL

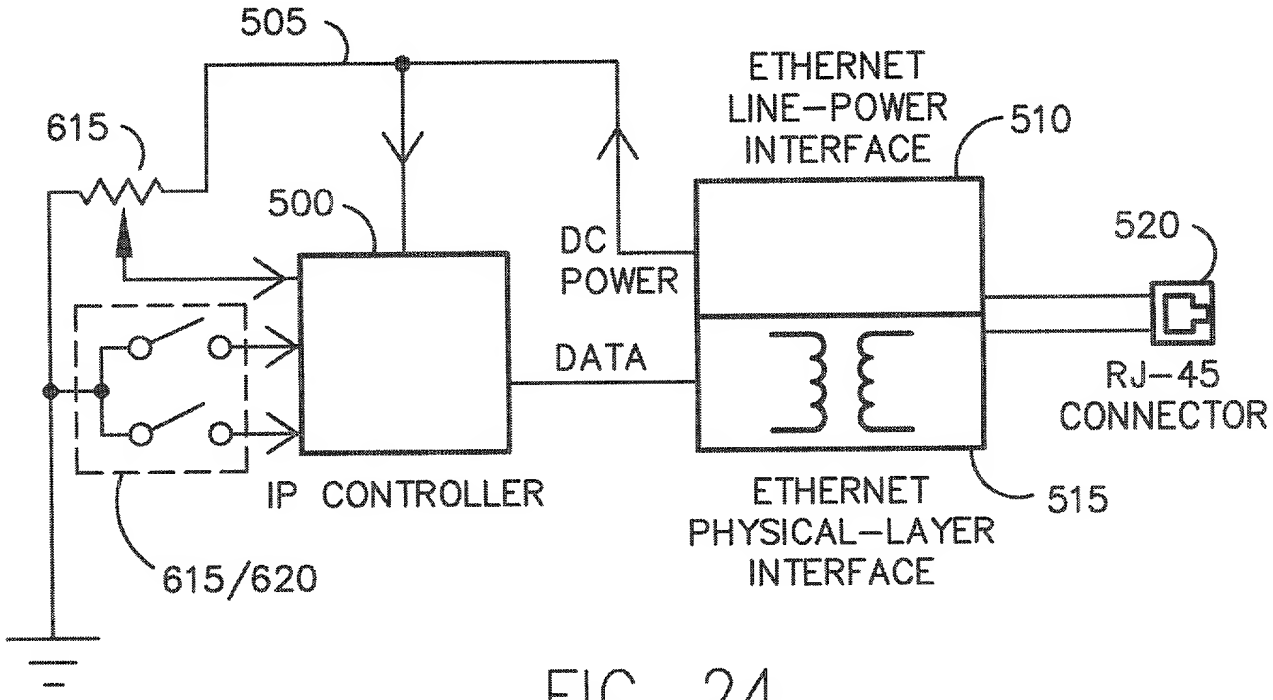
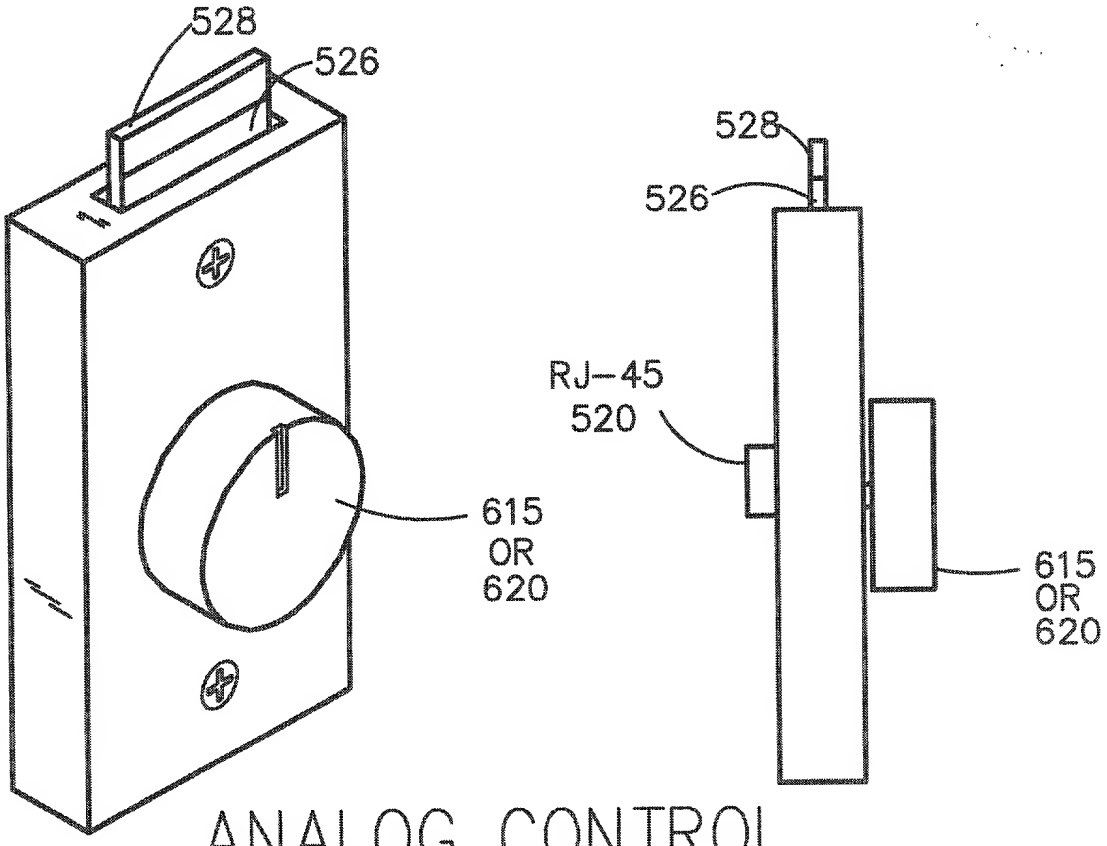


FIG. 24



ANALOG CONTROL

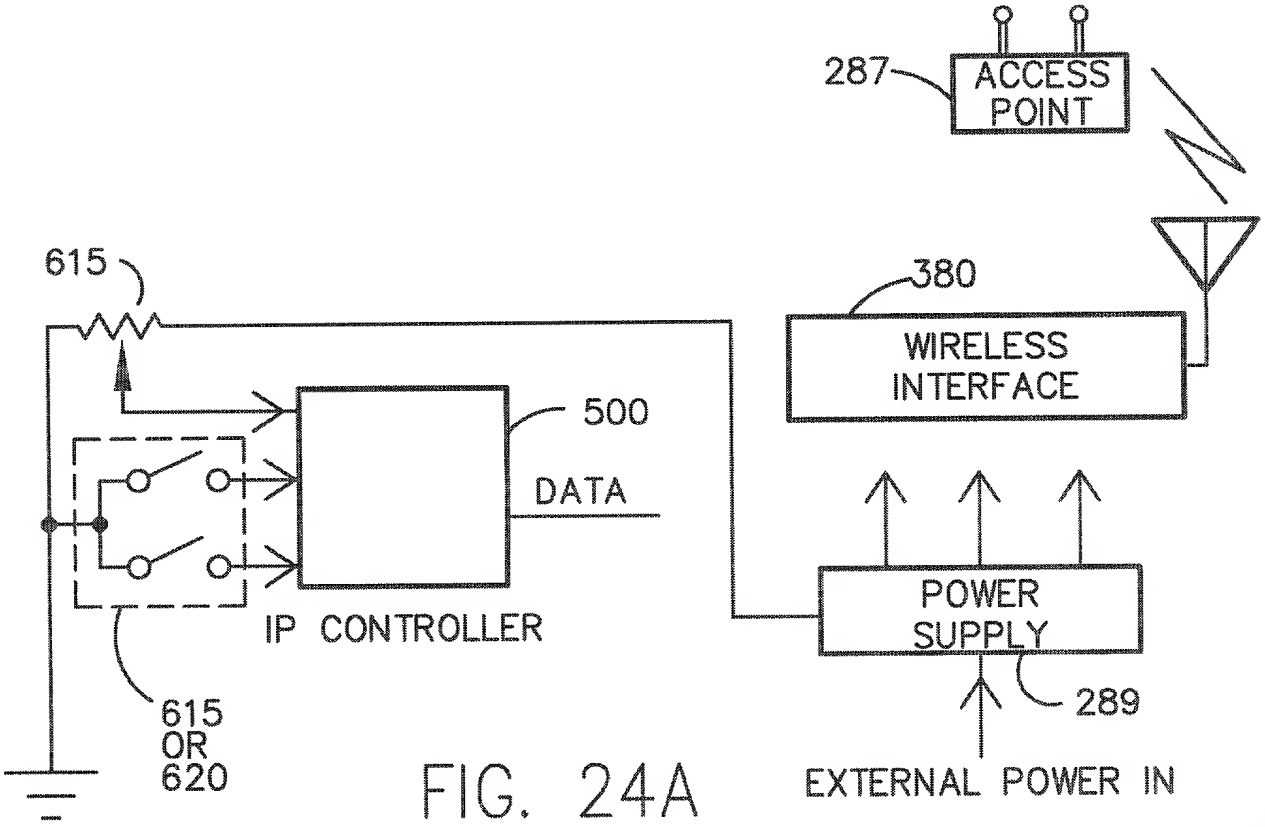
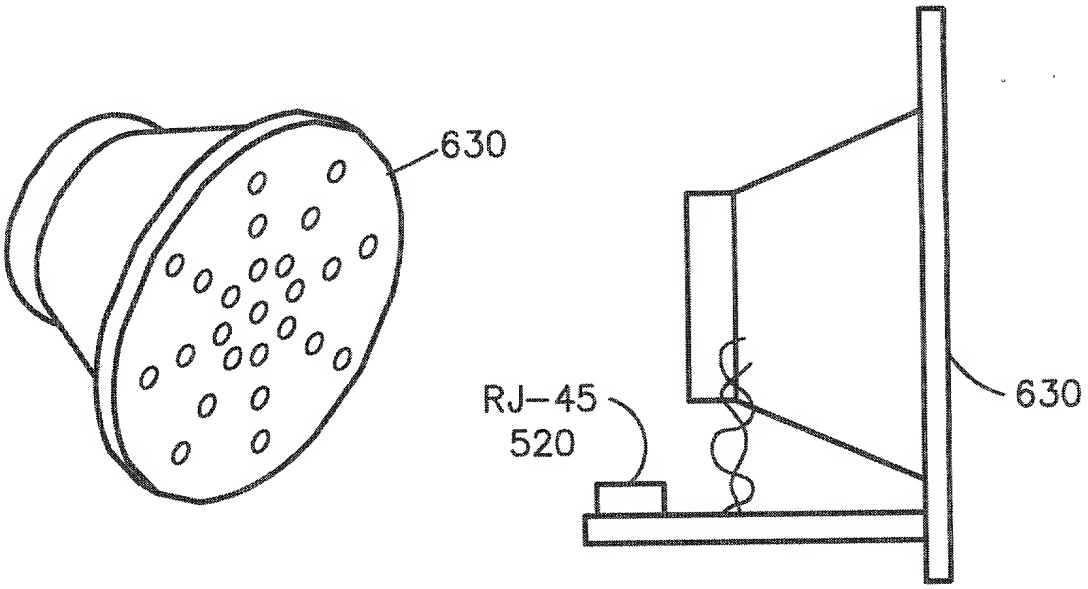


FIG. 24A

09565590 "010805



LOUDSPEAKER
WITH AMPLIFIER

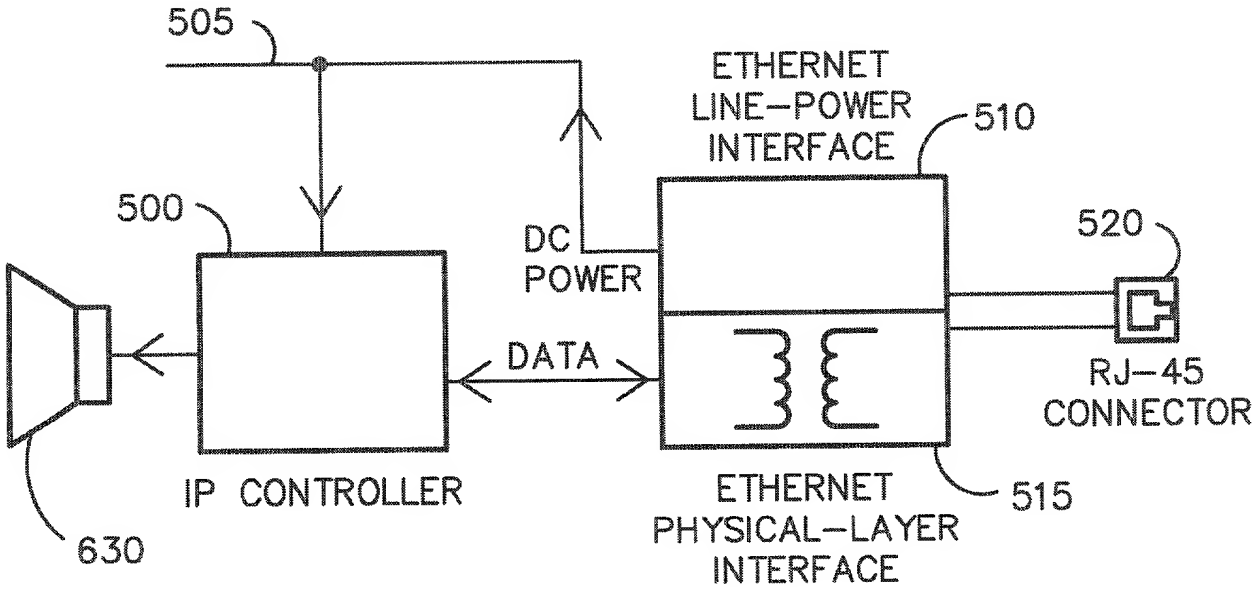
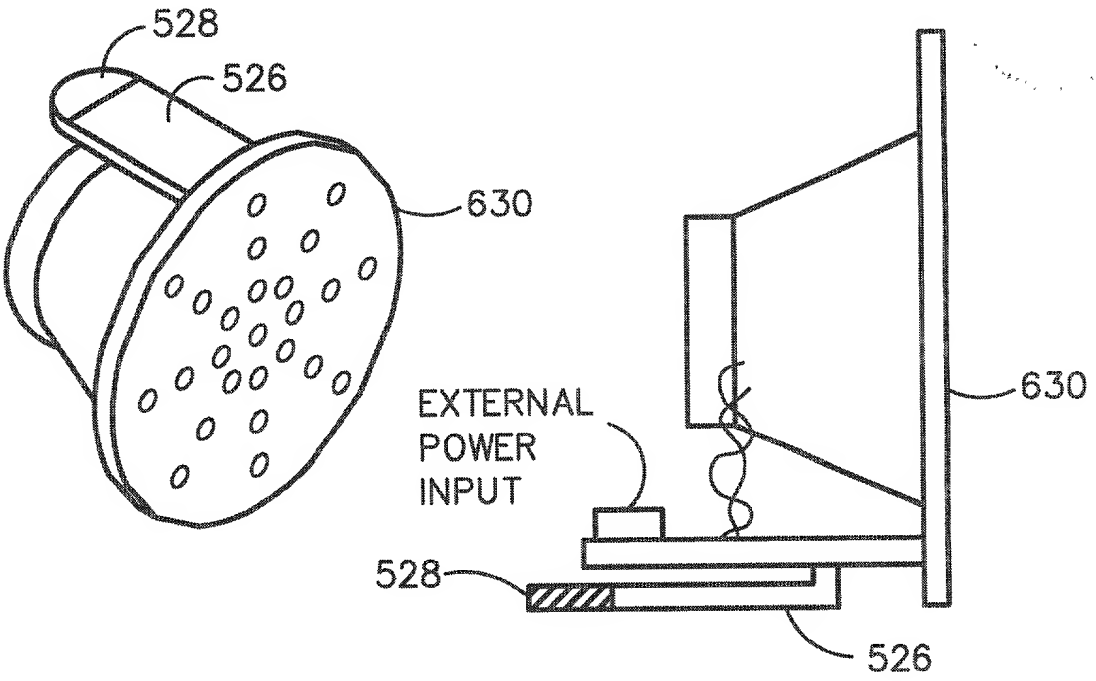


FIG. 25

09651302 - 041002



LOUDSPEAKER
WITH AMPLIFIER

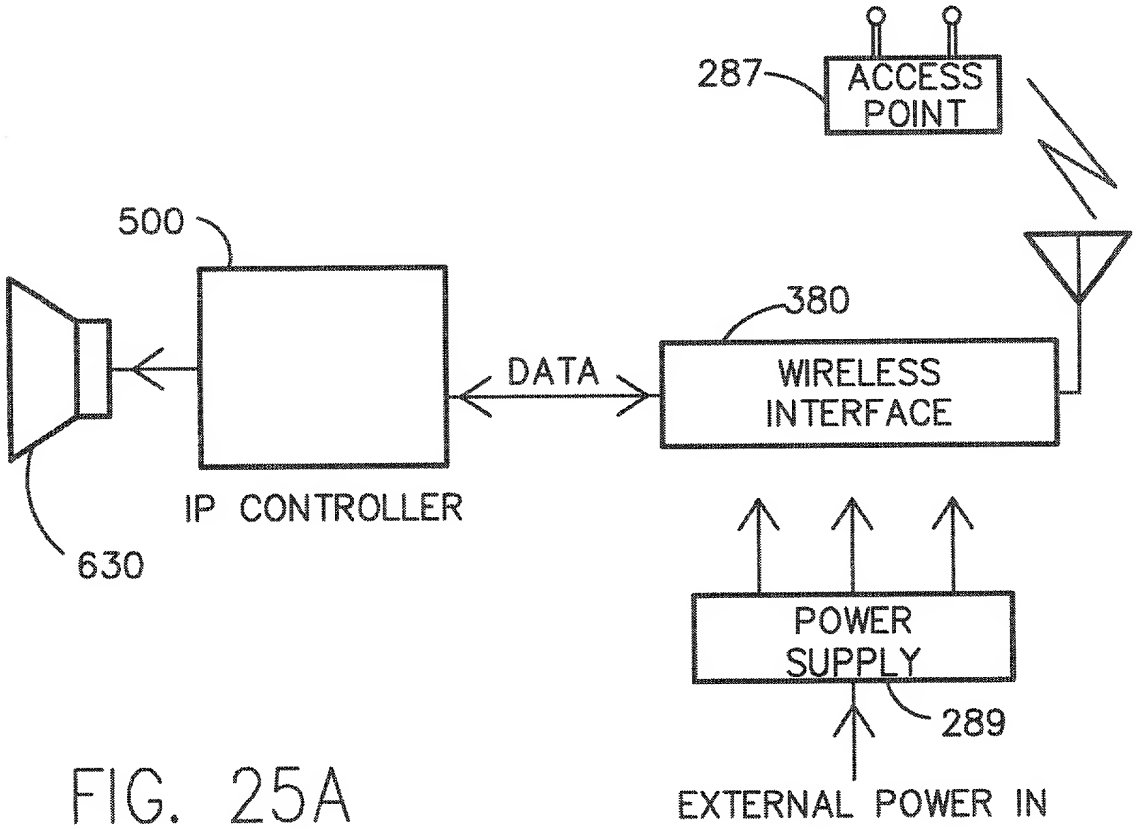
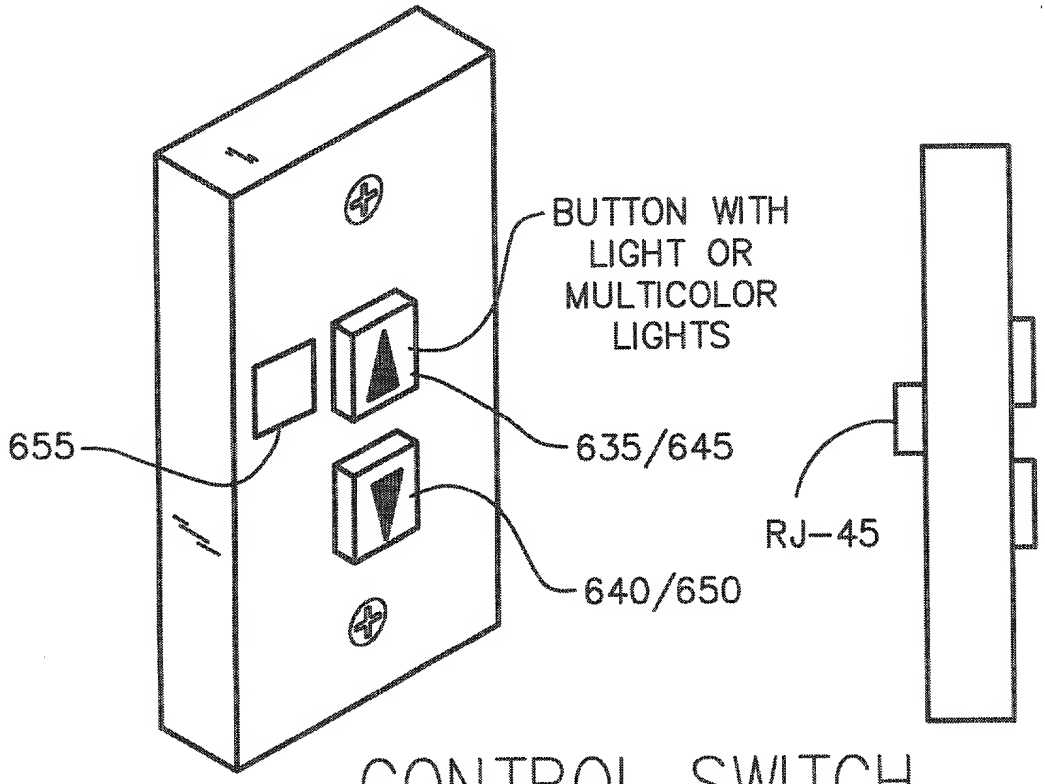


FIG. 25A



CONTROL SWITCH
INDICATOR LIGHT

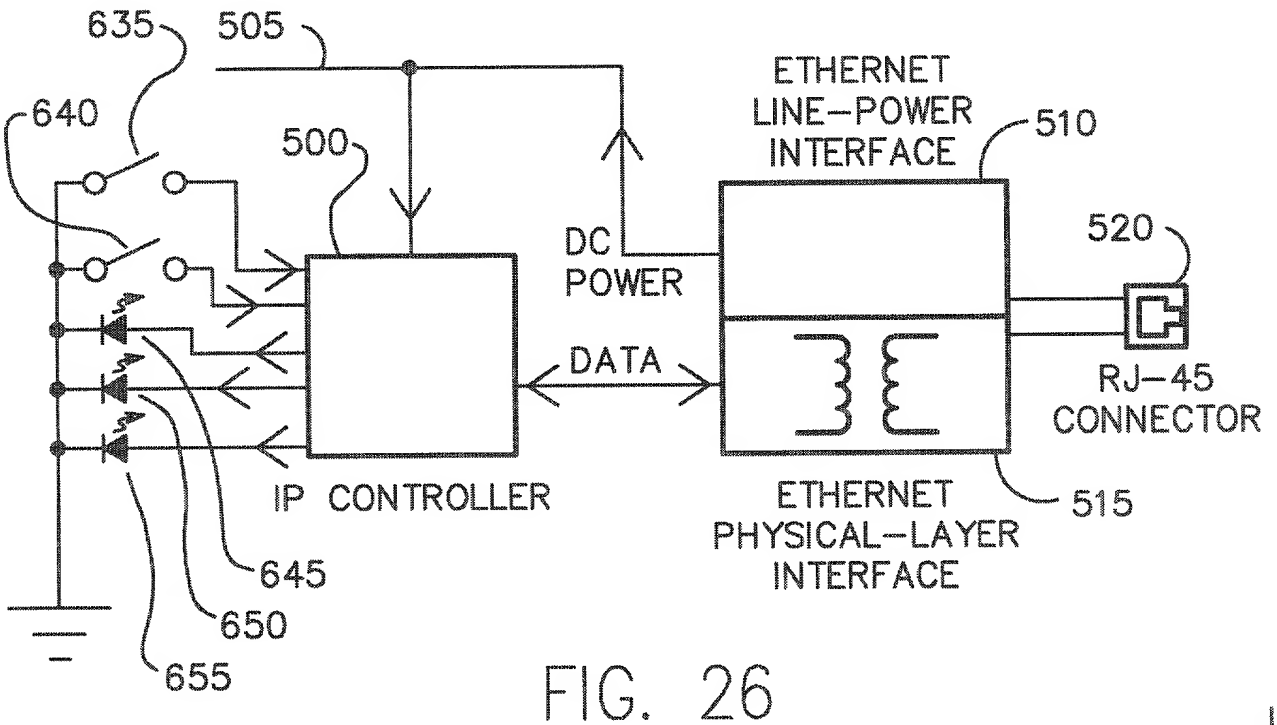
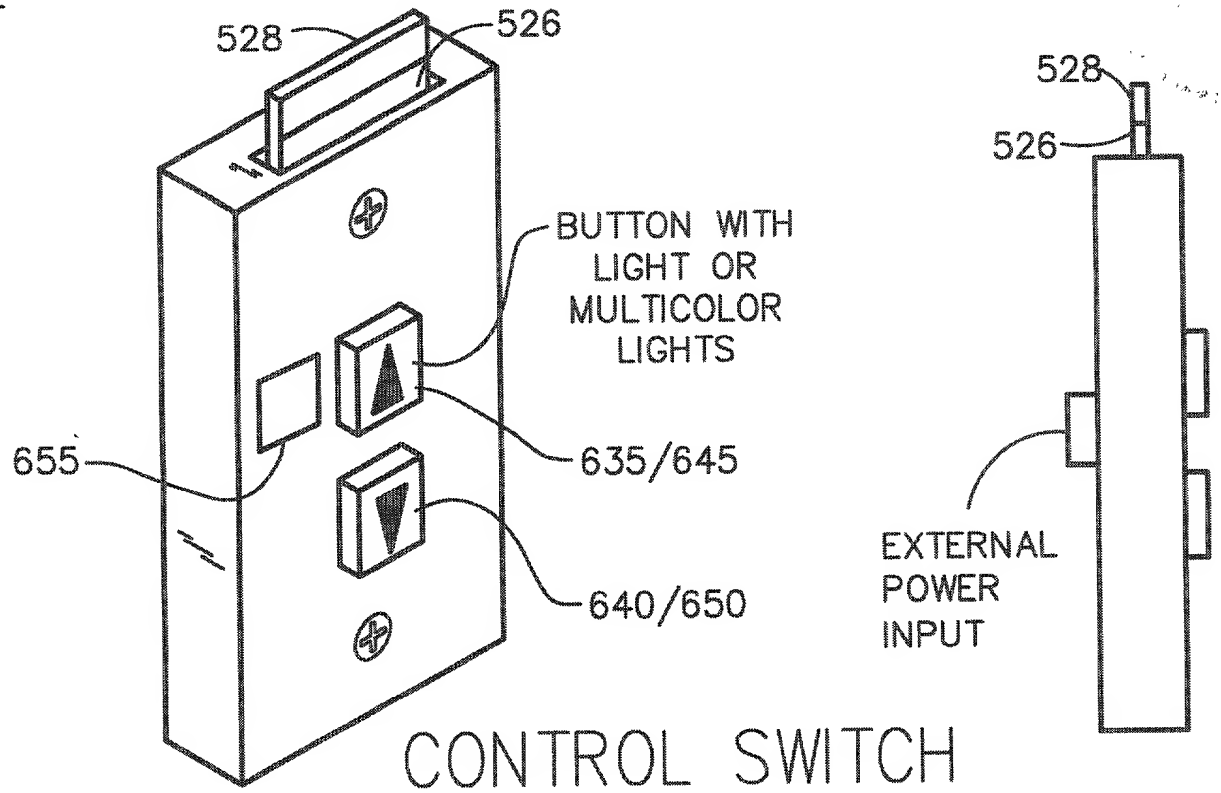


FIG. 26



CONTROL SWITCH INDICATOR LIGHT

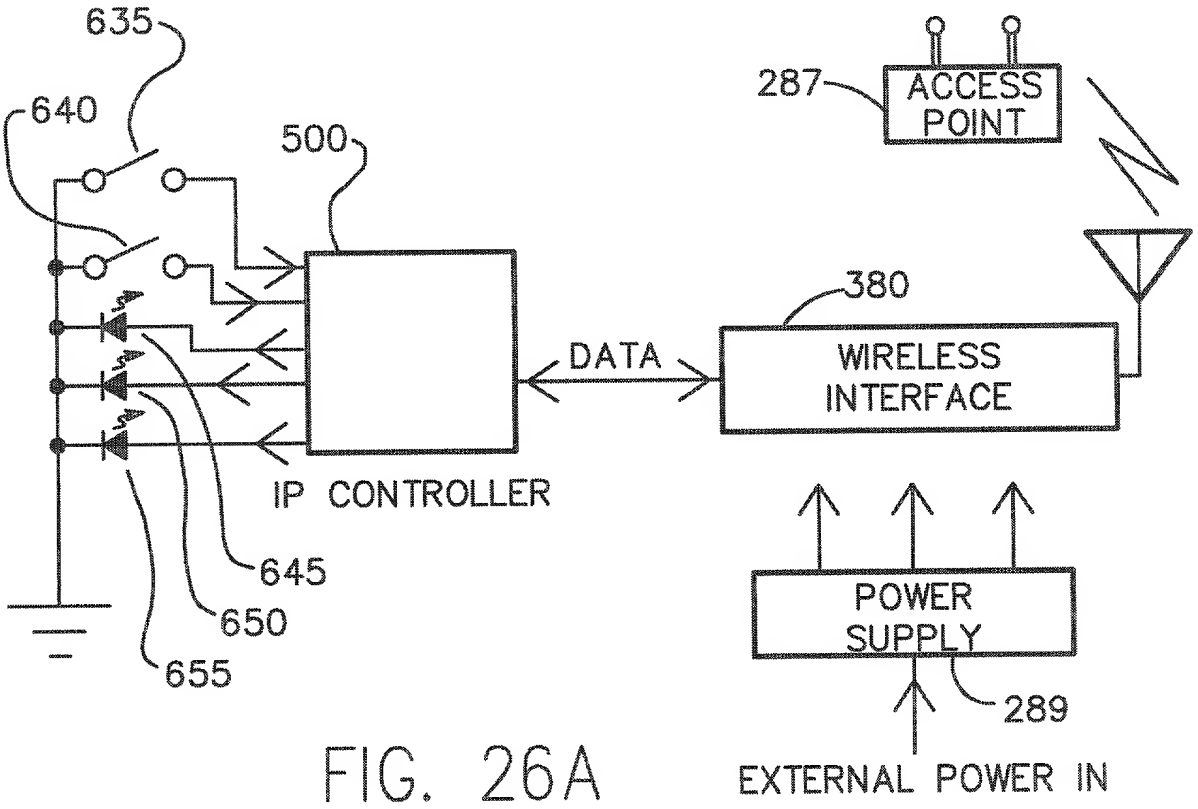
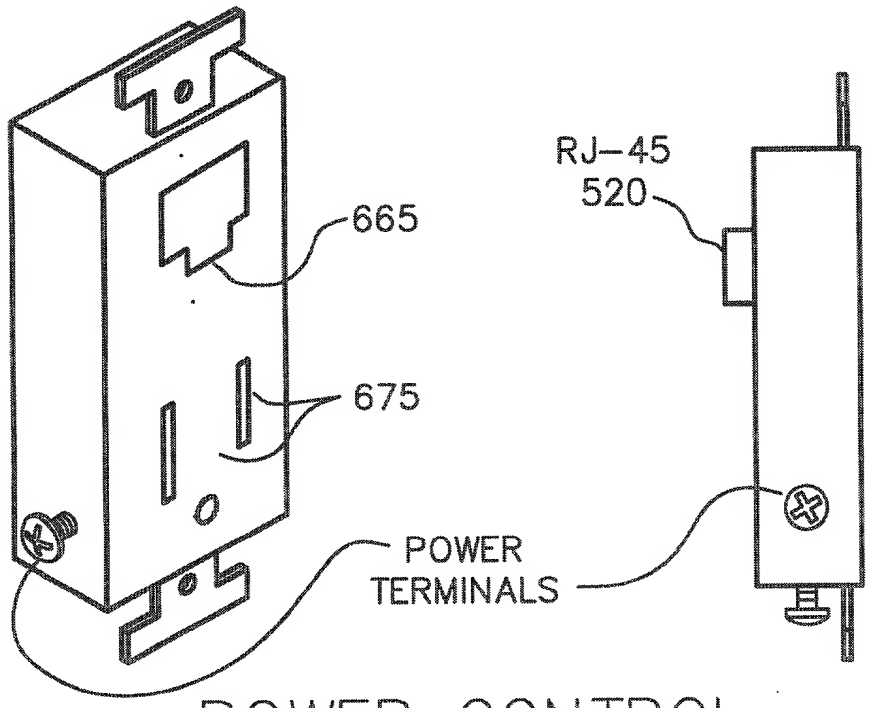


FIG. 26A

D596,630 D596,630



POWER CONTROL
(SWITCH OR DIMMER)

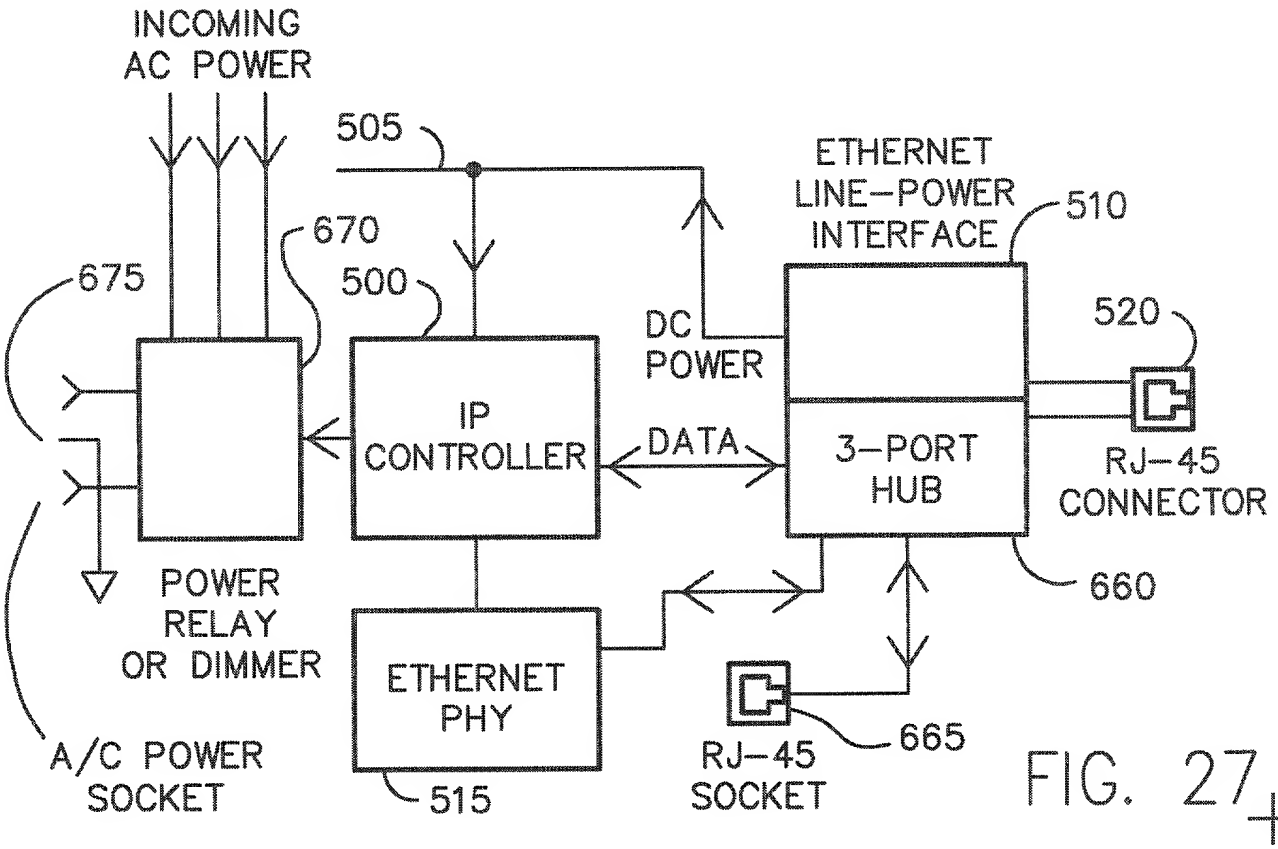
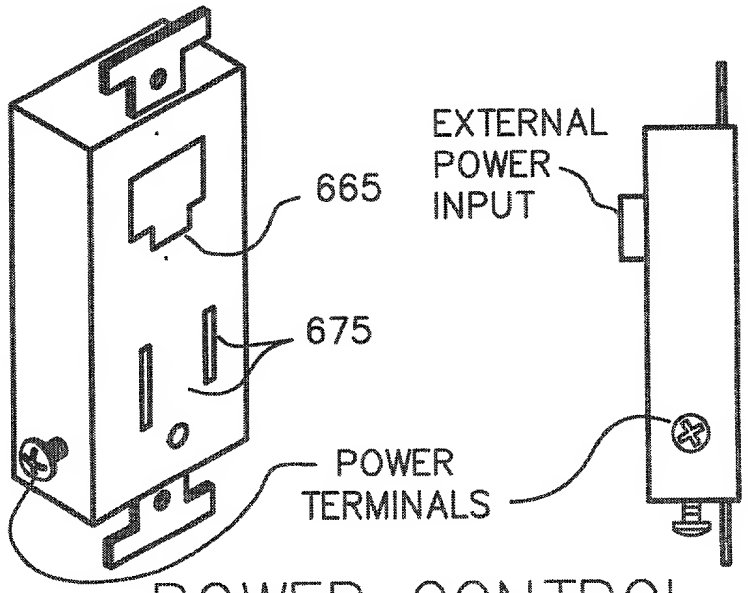


FIG. 27



POWER CONTROL
(SWITCH OR DIMMER)

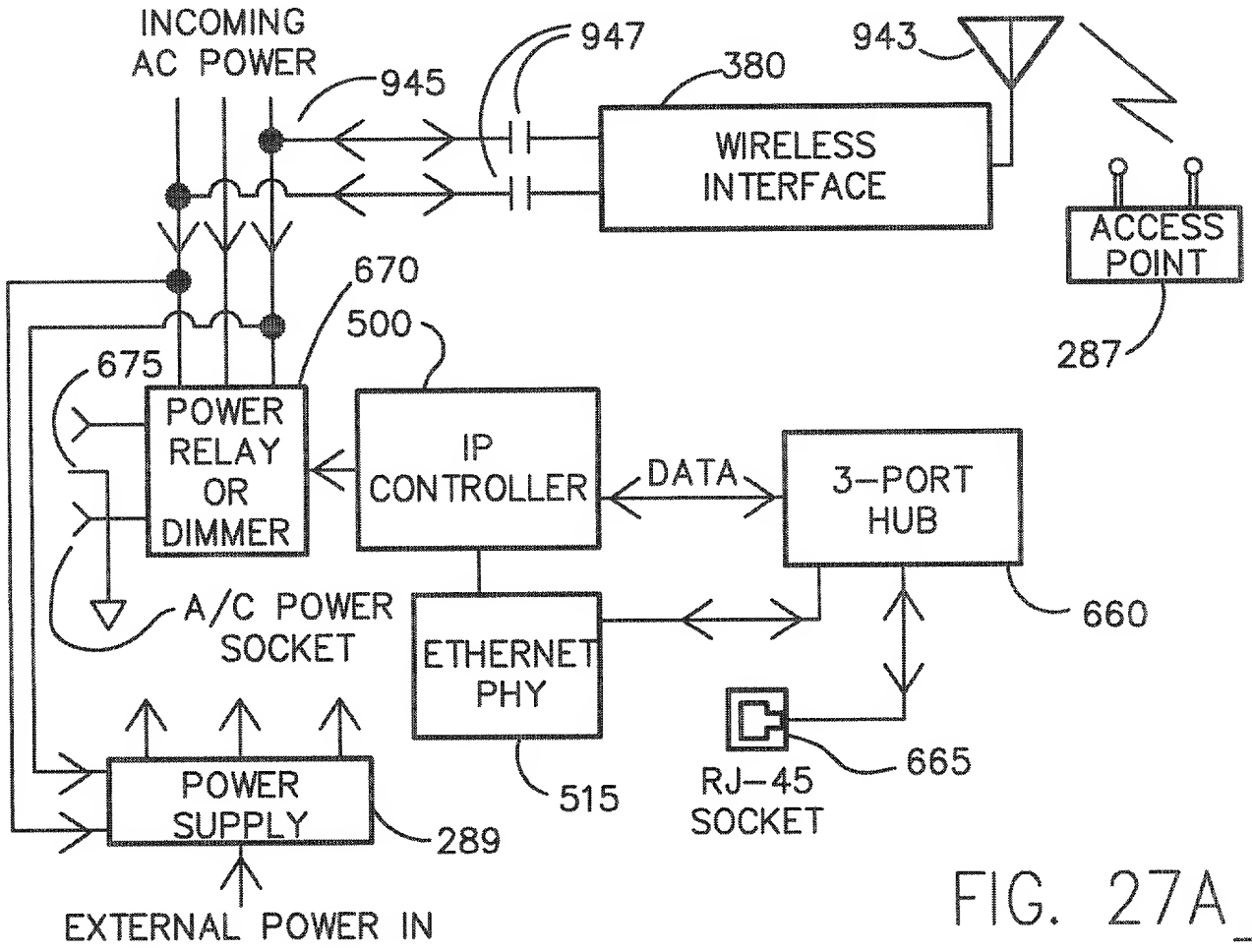
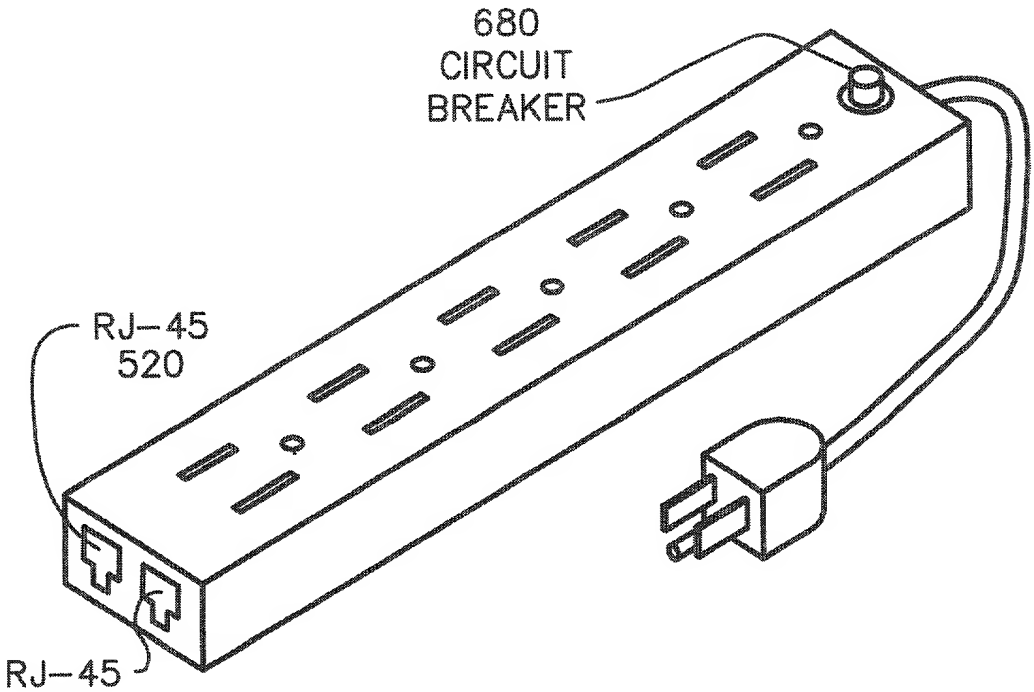


FIG. 27A

D596,650 - 01/06/09



MUTI-POWER CONTROL MULTIPLE SWITCH AND/OR DIMMER

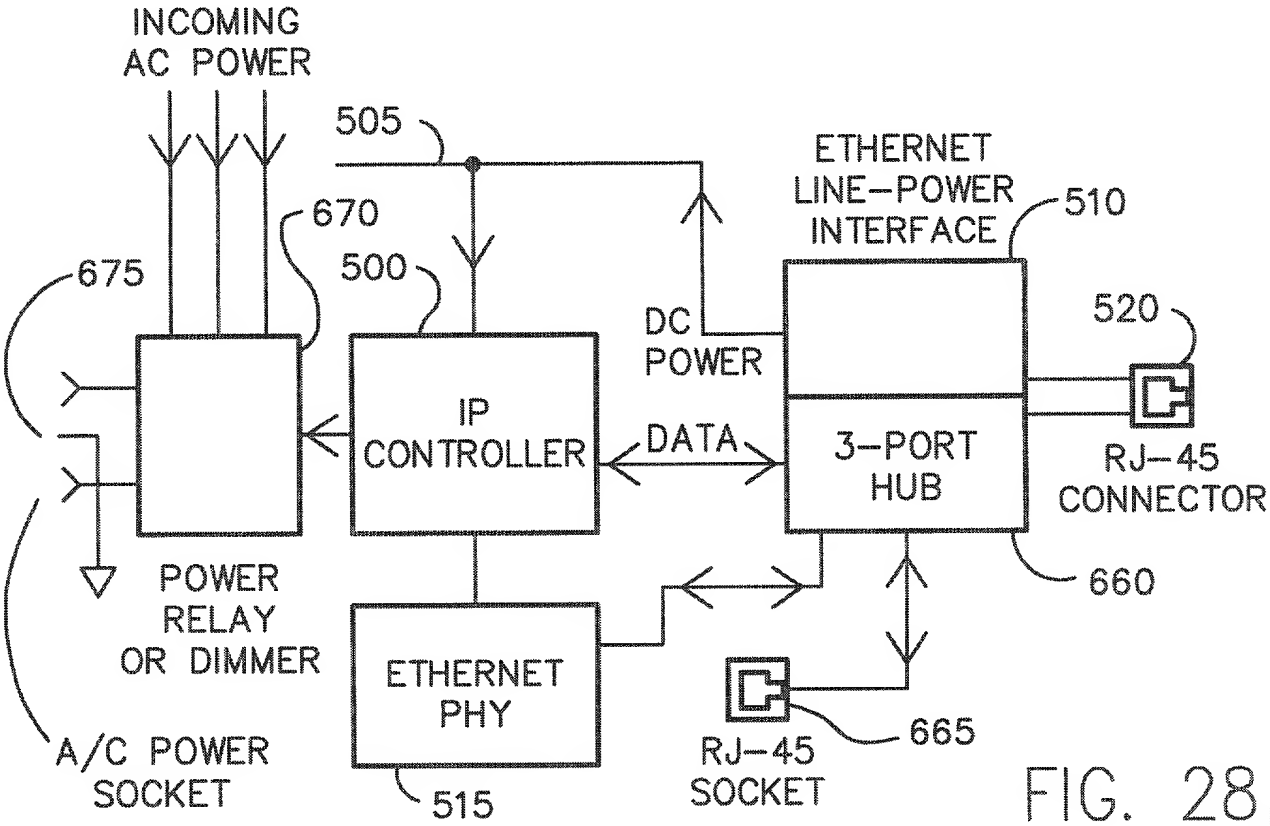
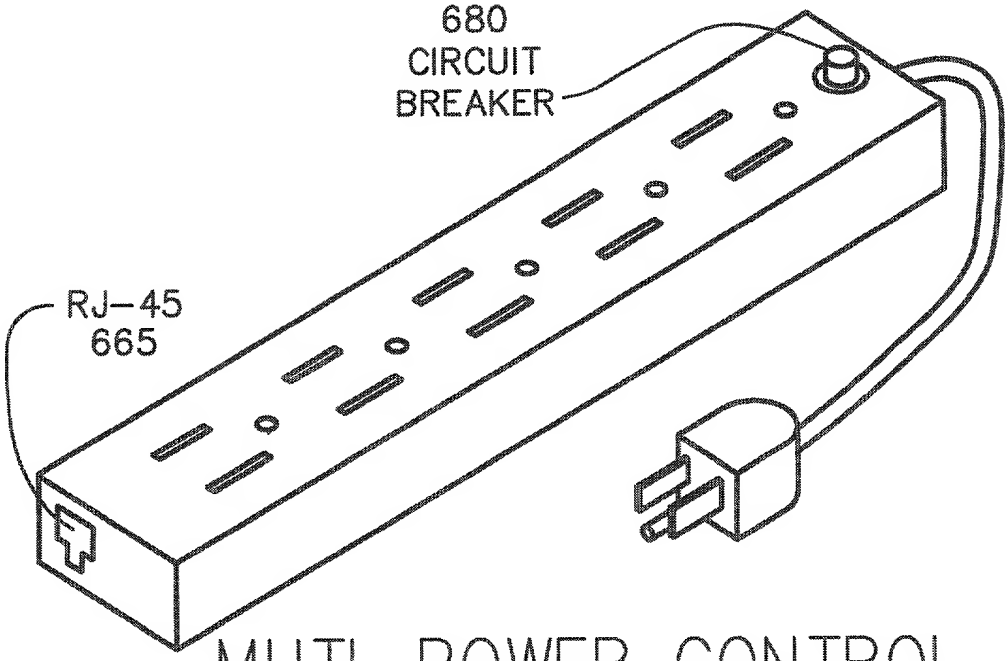


FIG. 28

05656150 "01-08-02



MUTI-POWER CONTROL MULTIPLE SWITCH AND/OR DIMMER

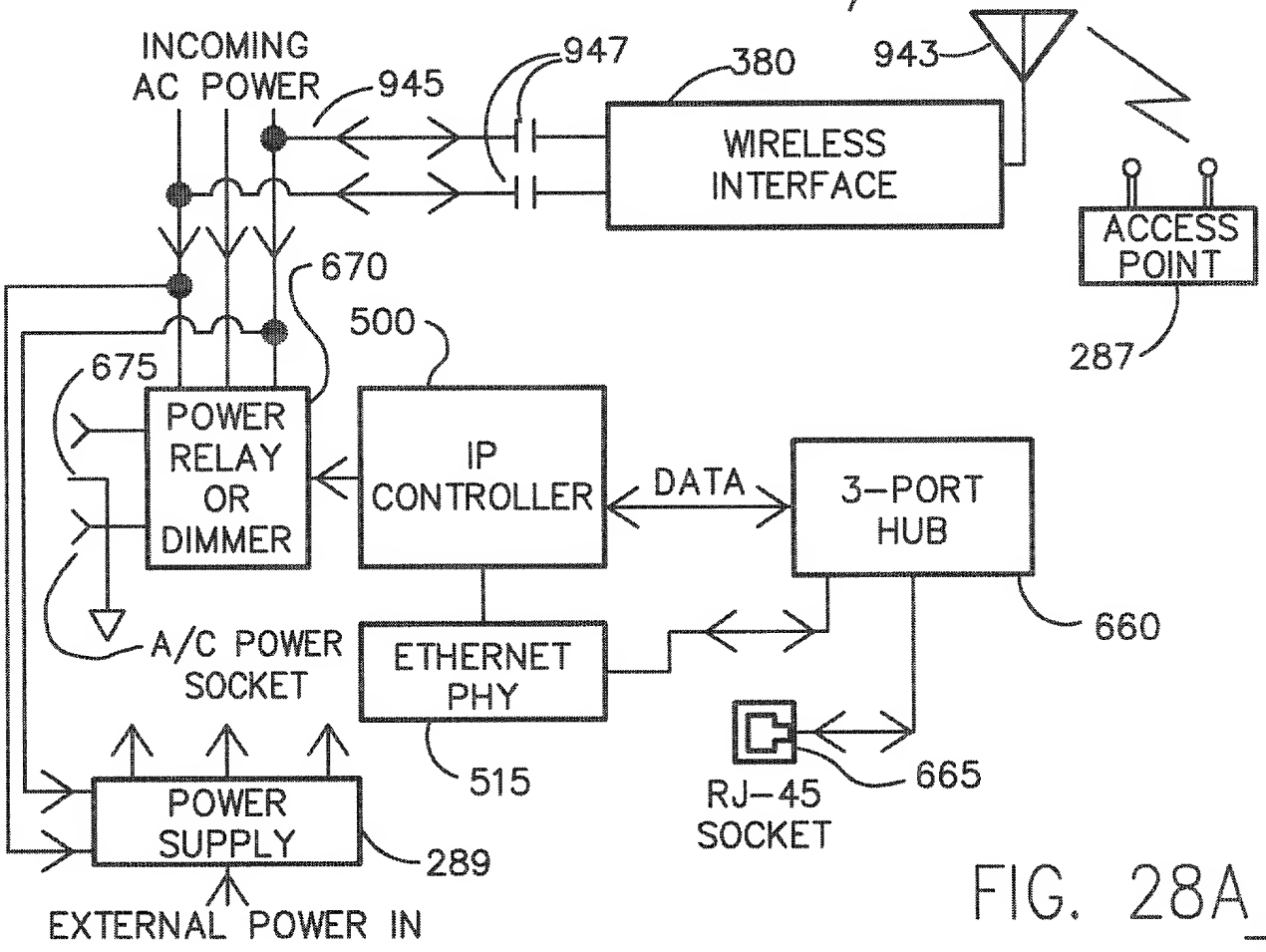
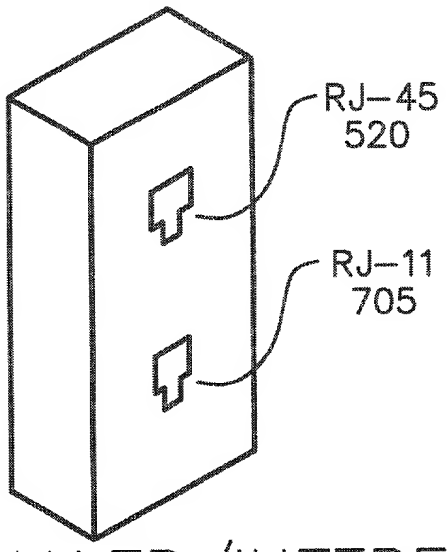


FIG. 28A

09656436 - 070802



TELEPHONE DIALER/INTERFACE

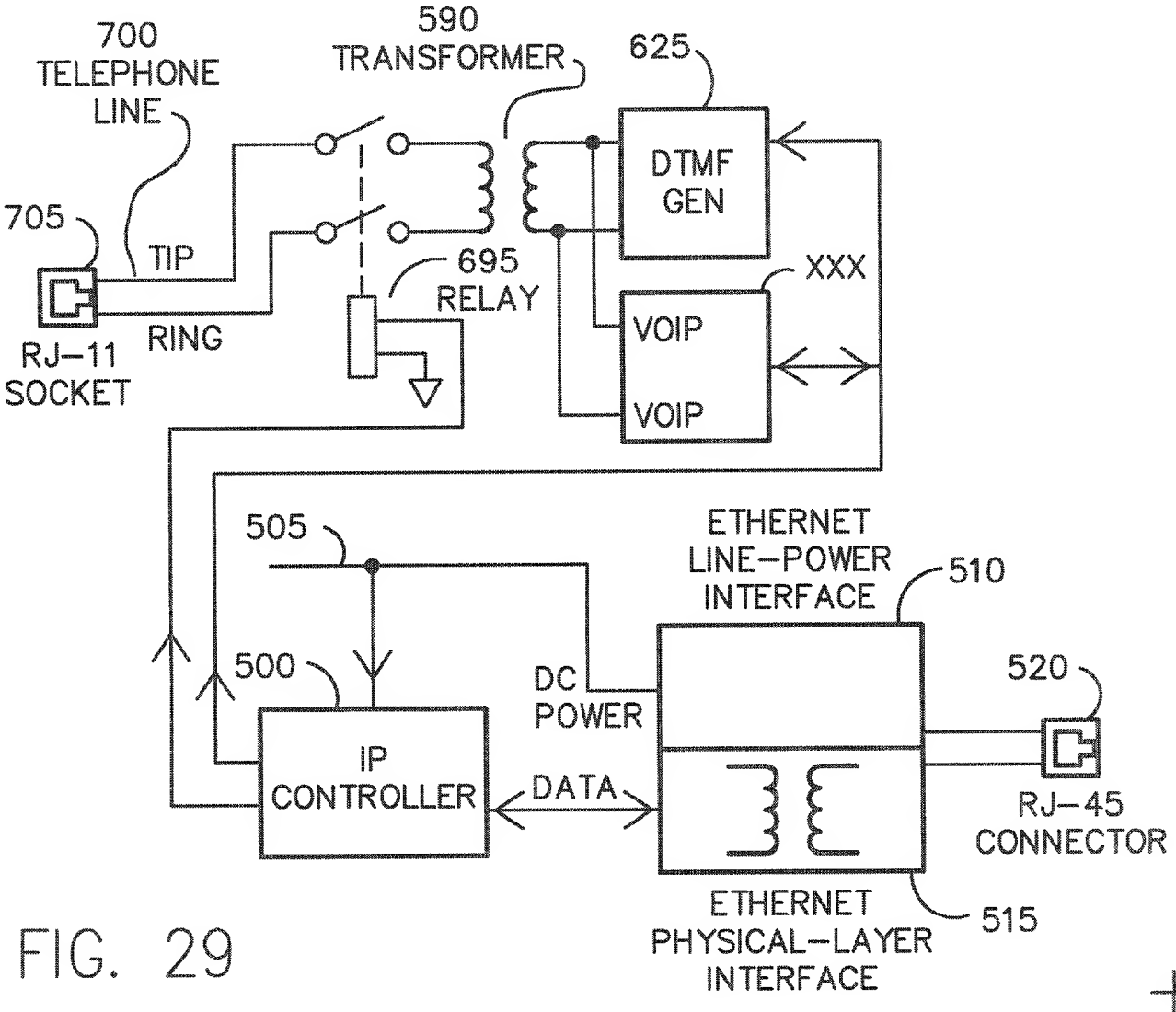
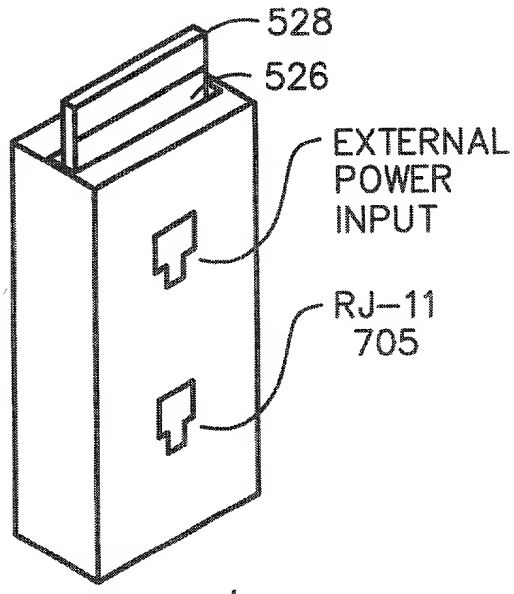


FIG. 29



TELEPHONE DIALER/INTERFACE

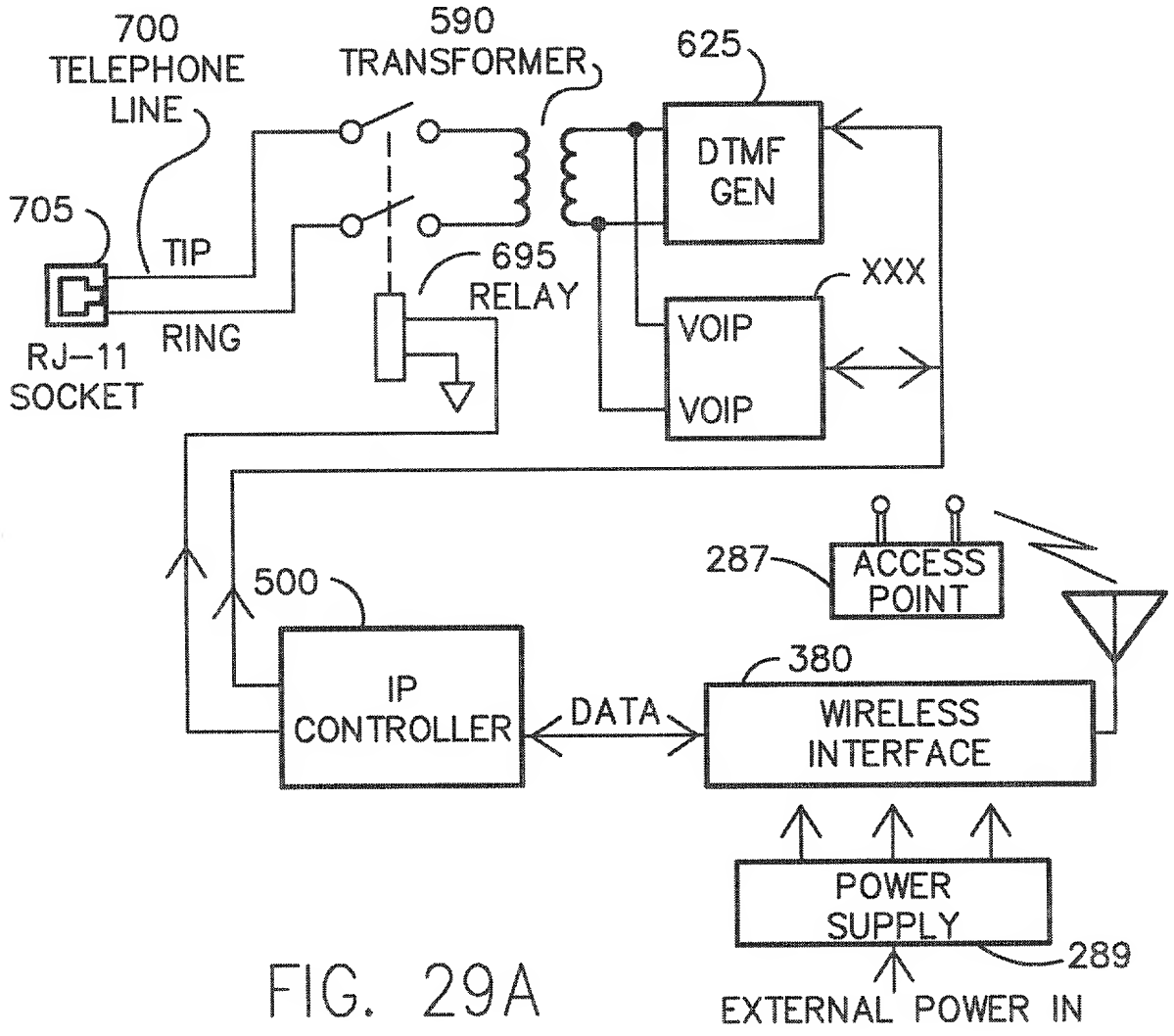
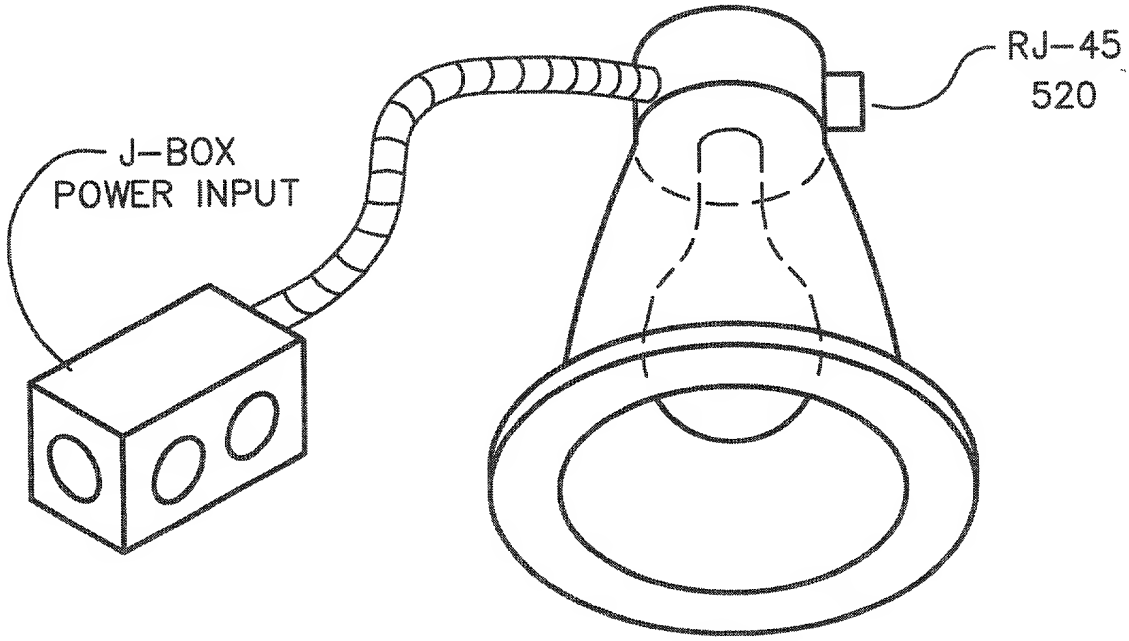


FIG. 29A

US 2005/0159150 A1



LIGHT FIXTURE

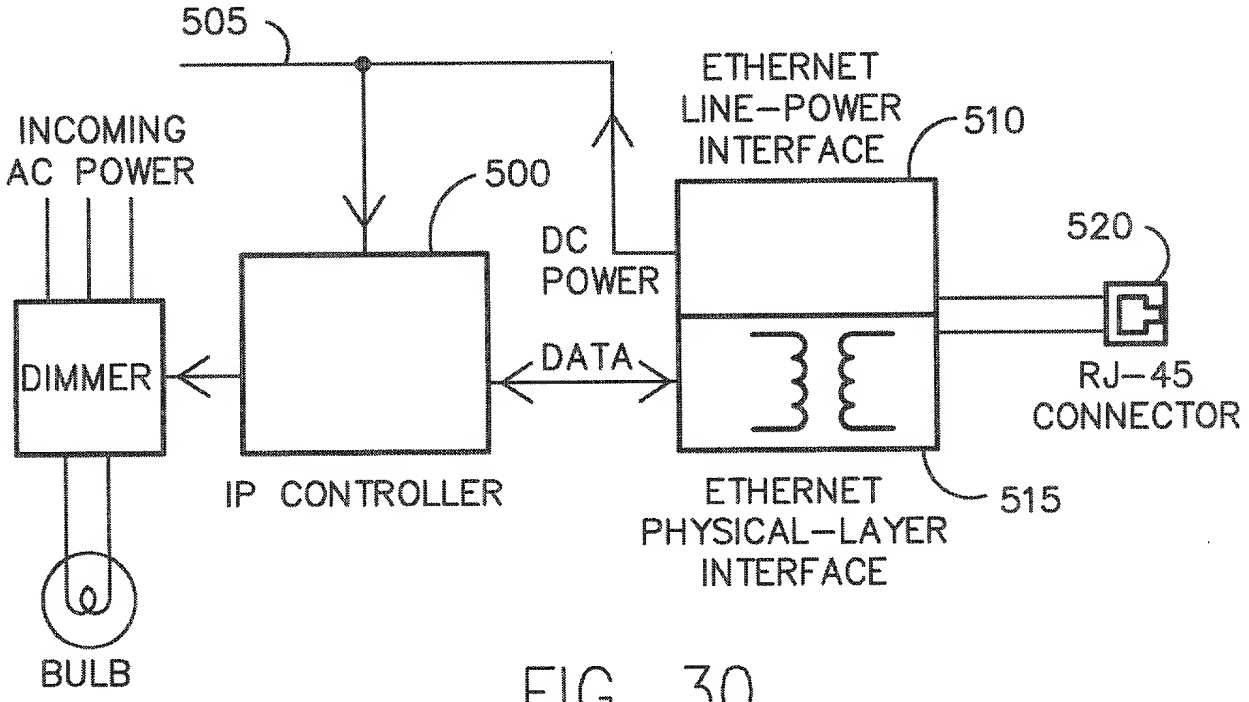
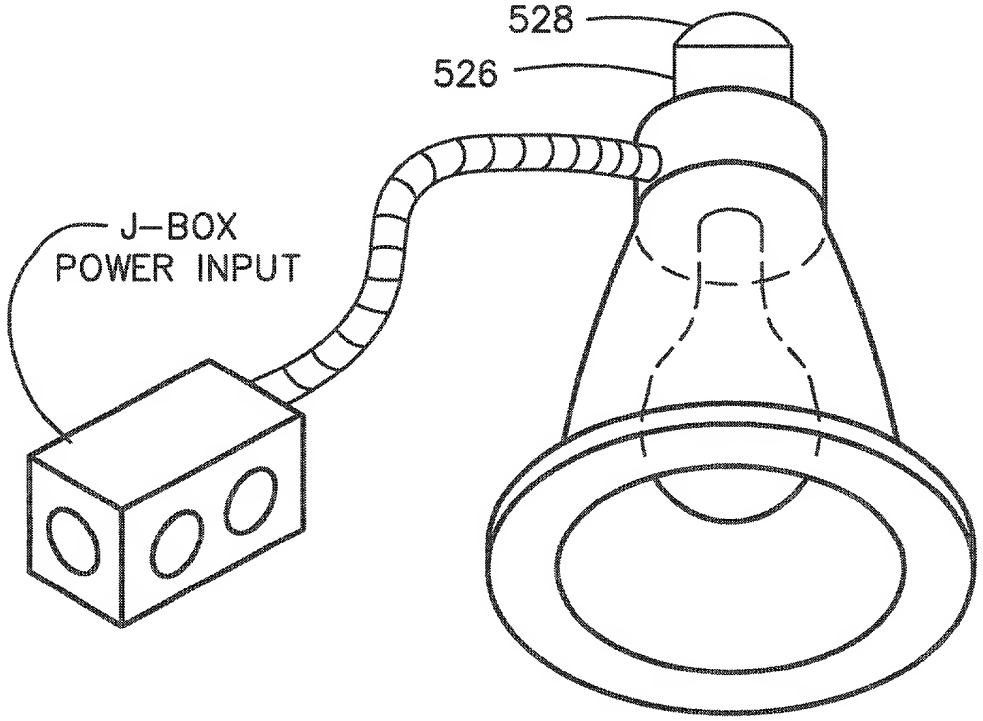


FIG. 30



LIGHT FIXTURE

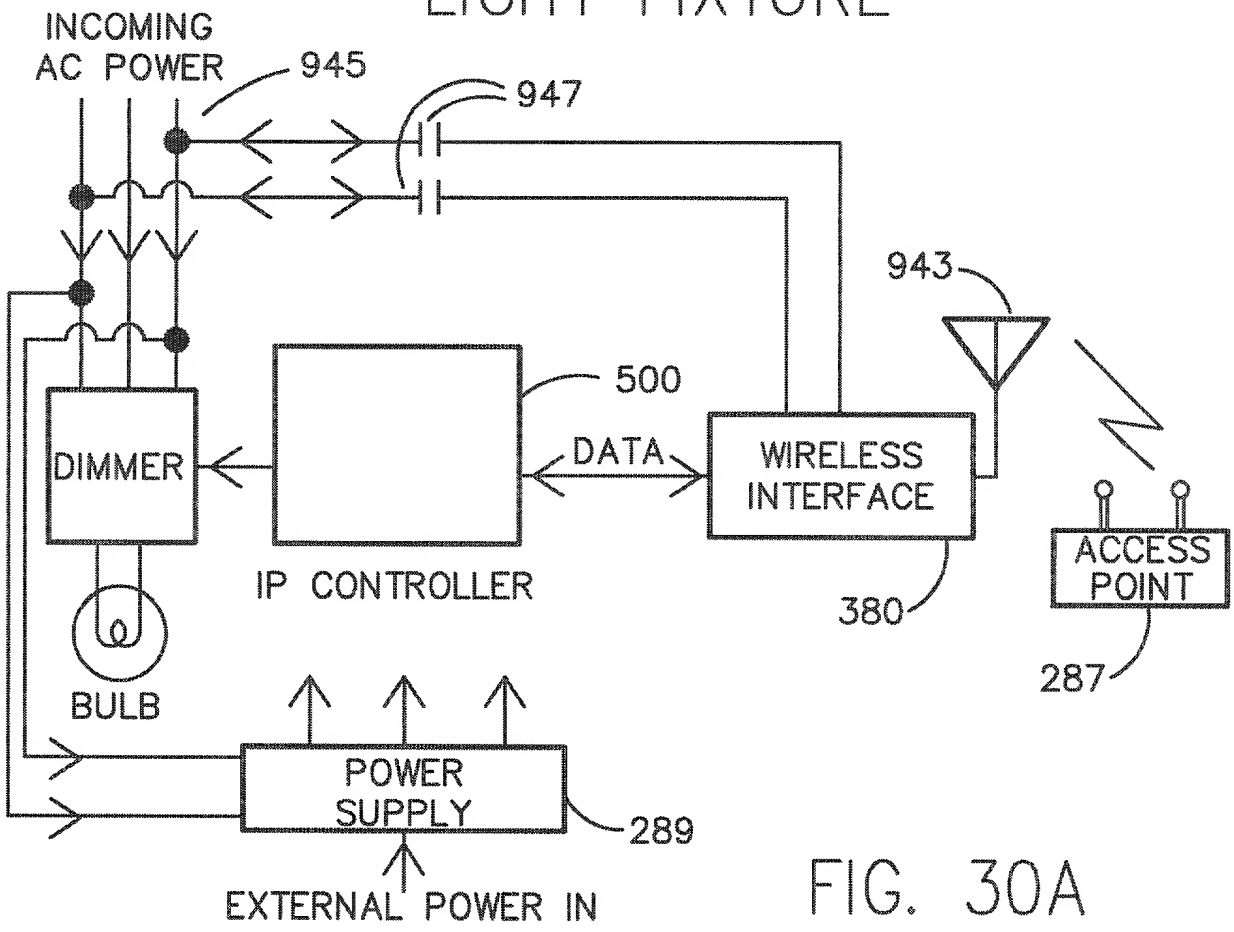
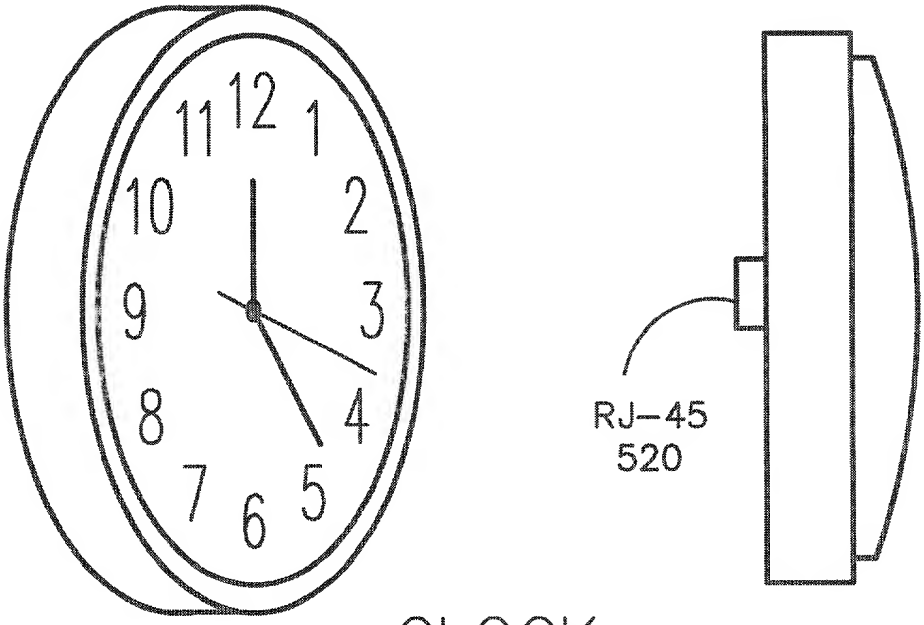


FIG. 30A

US 9,955,551 B2



CLOCK

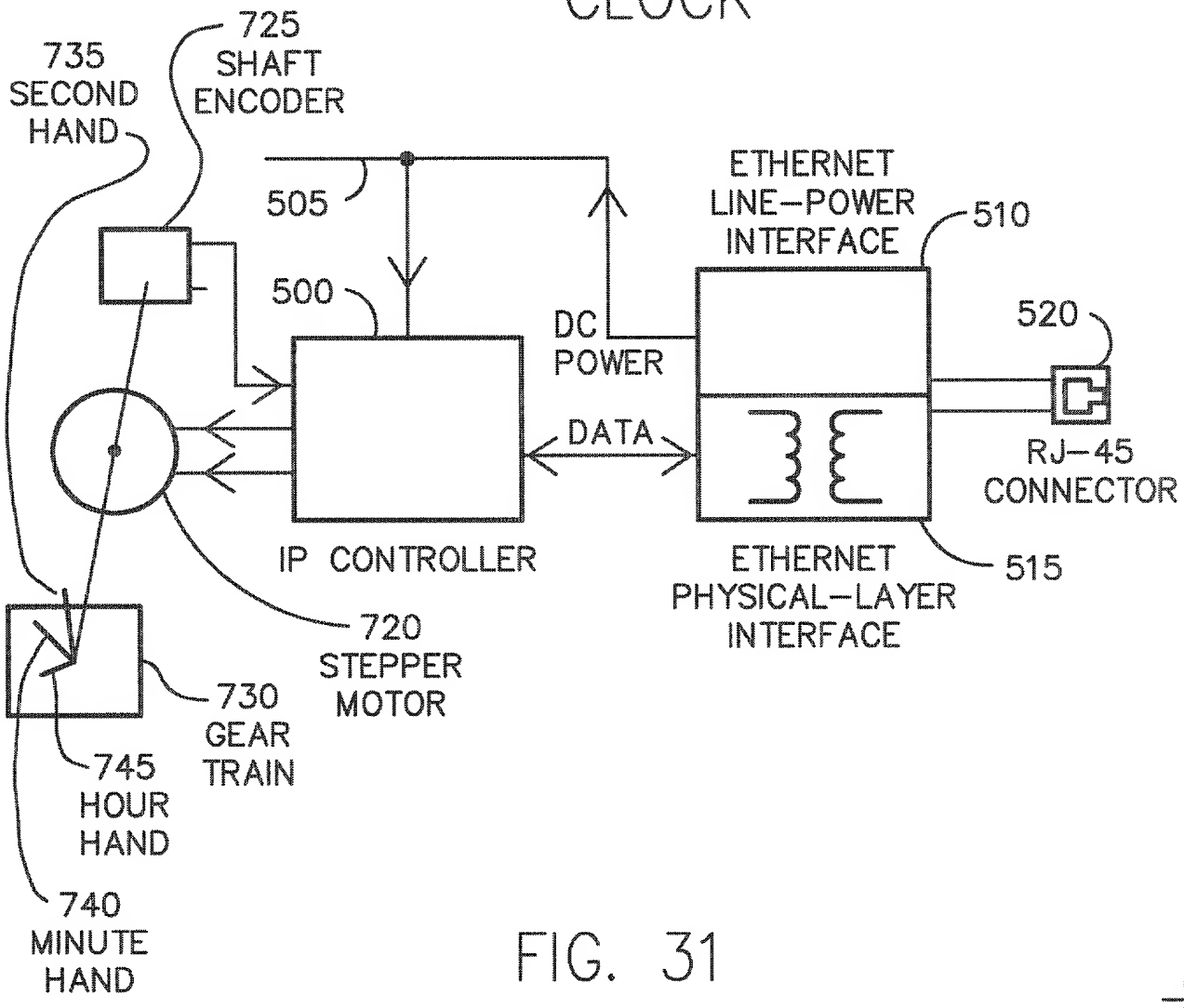
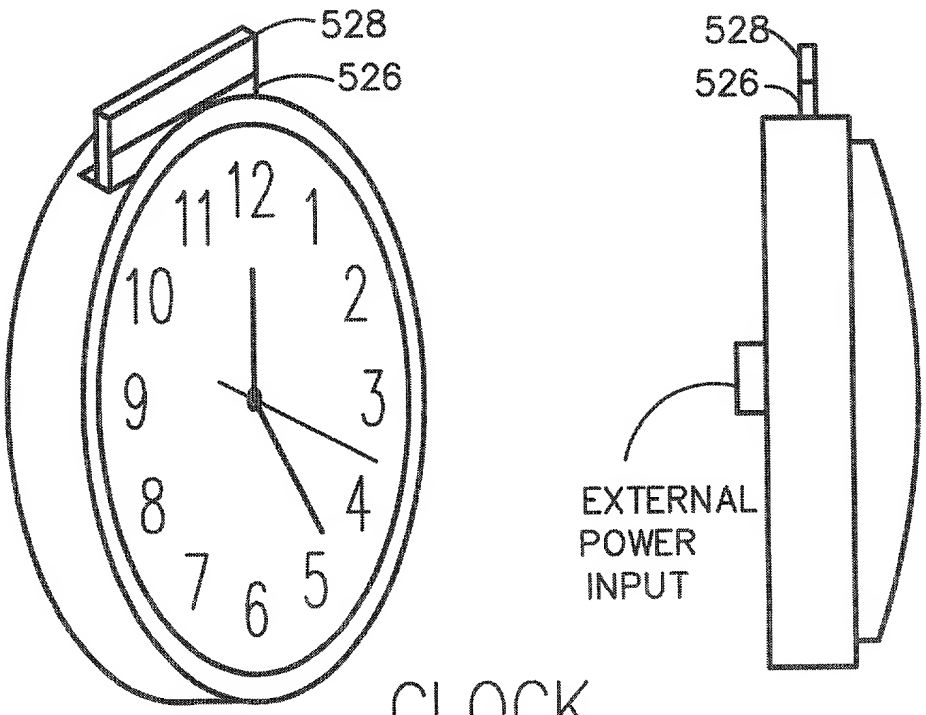


FIG. 31

0656530.0608



CLOCK

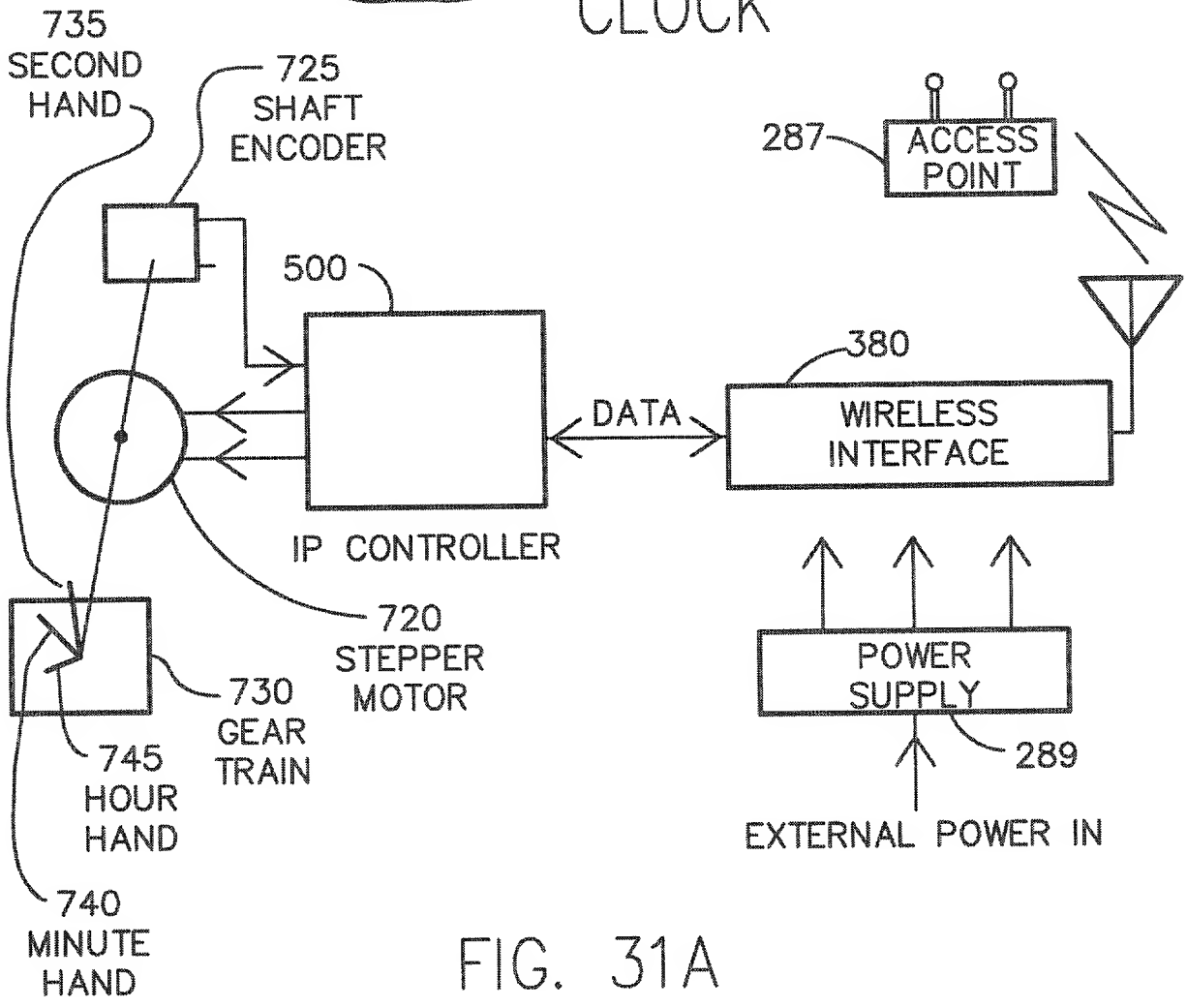
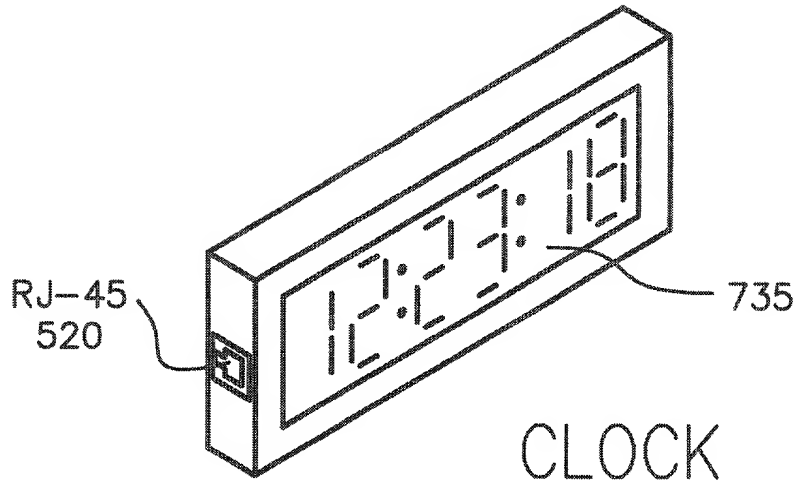


FIG. 31A

20070050950


RJ-45
520
735

CLOCK

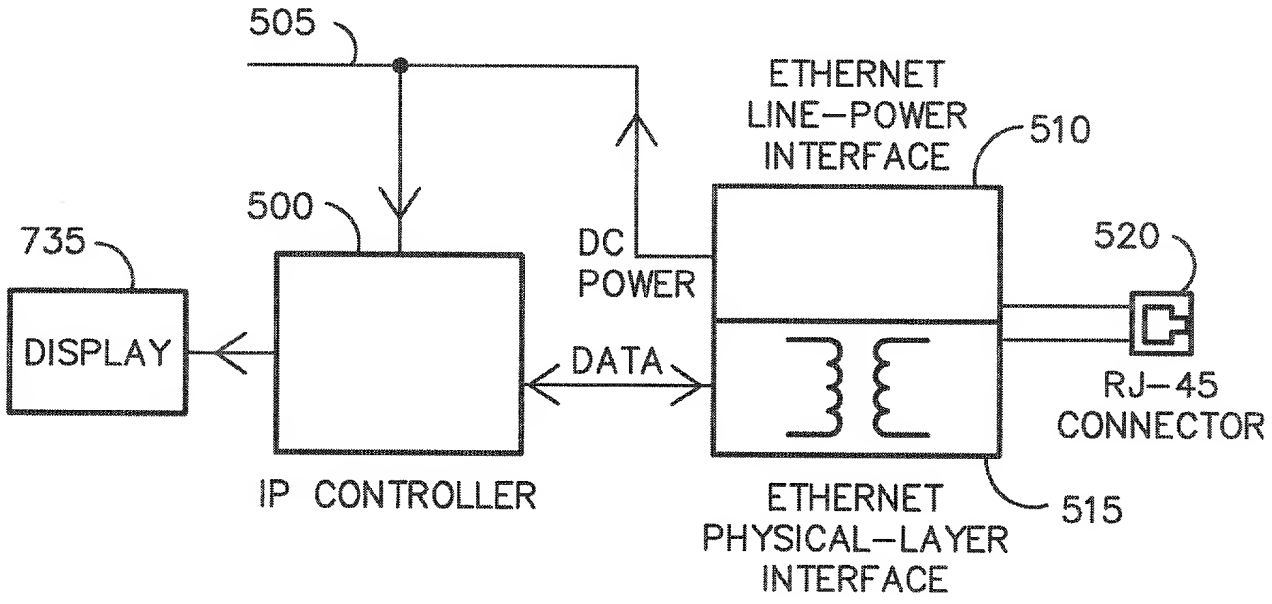
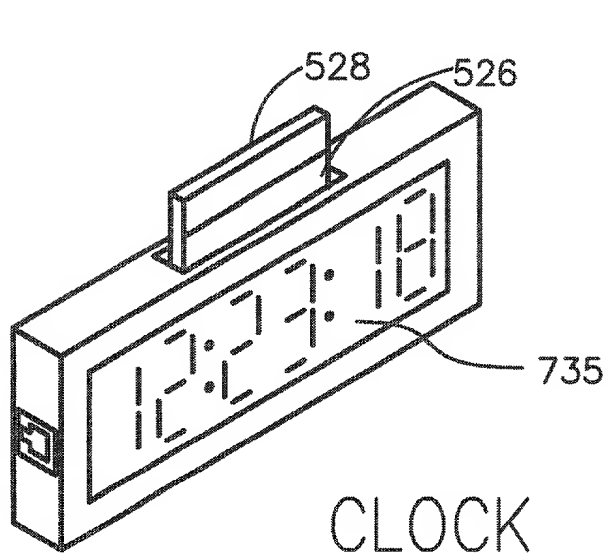
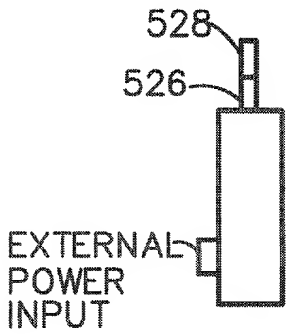

505
ETHERNET
LINE-POWER
INTERFACE
510
500
735
DC
POWER
520
DISPLAY
DATA
RJ-45
CONNECTOR
IP CONTROLLER
ETHERNET
PHYSICAL-LAYER
INTERFACE
515

FIG. 32





CLOCK

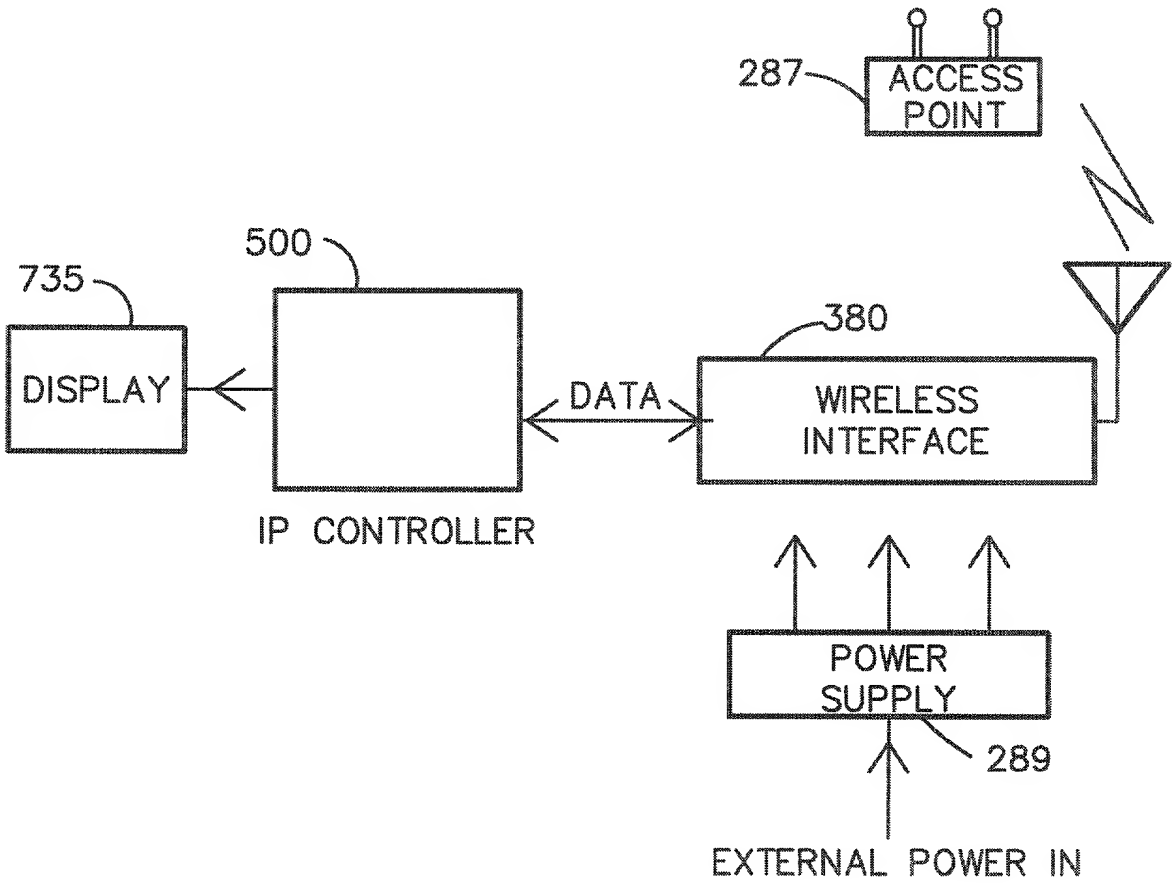
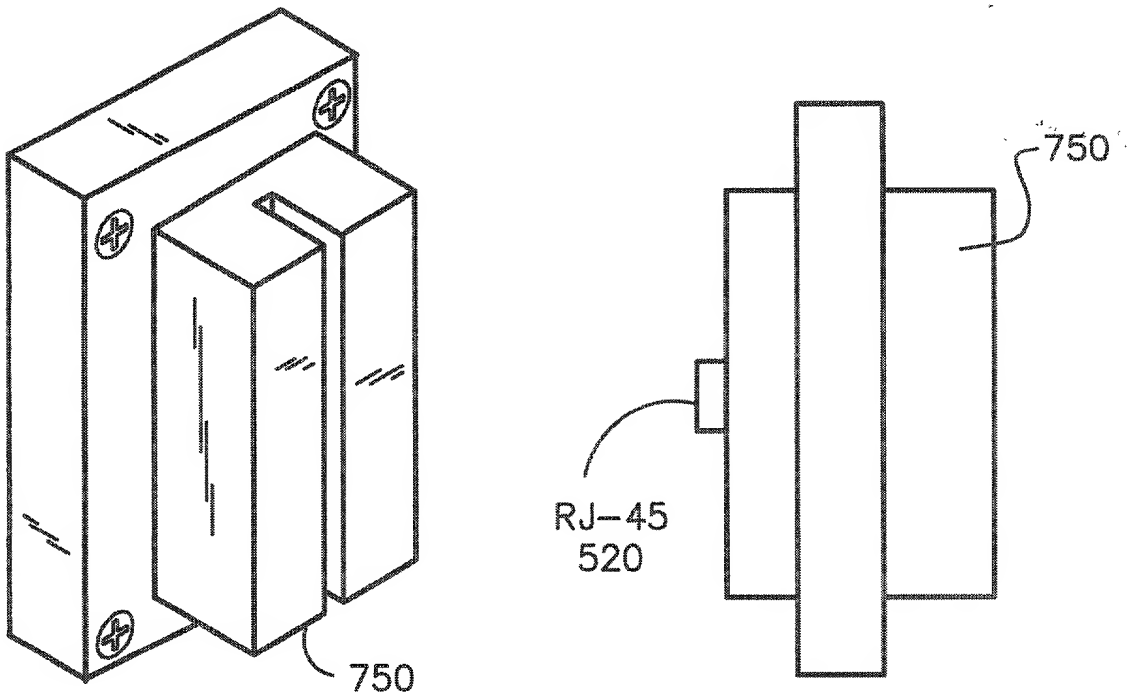


FIG. 32A



MAG STRIP READER

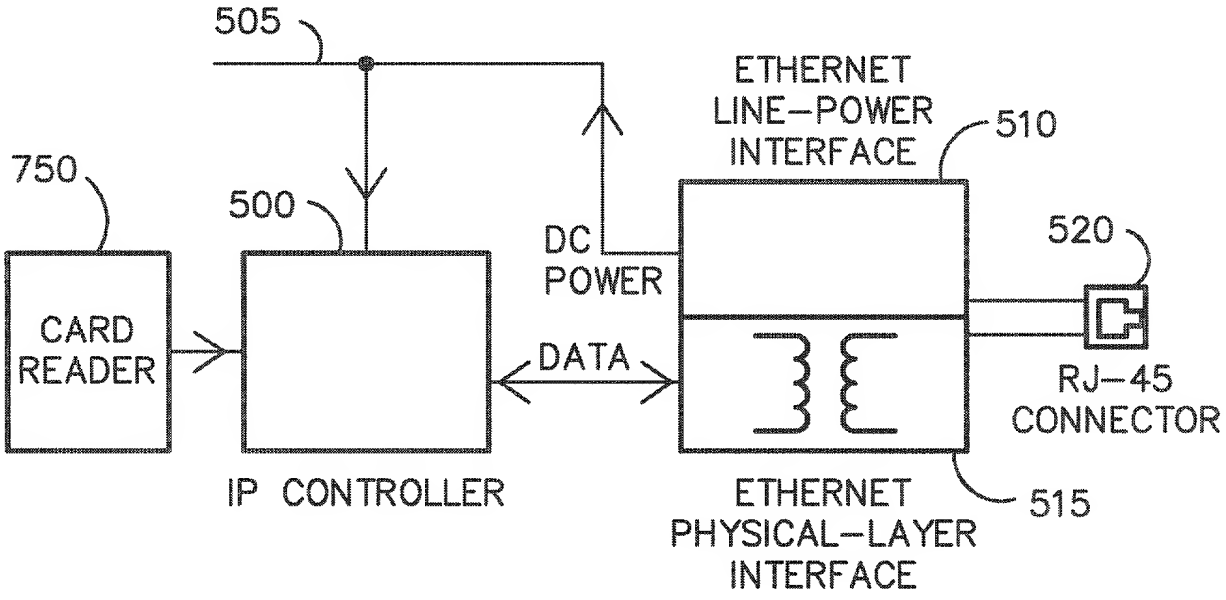
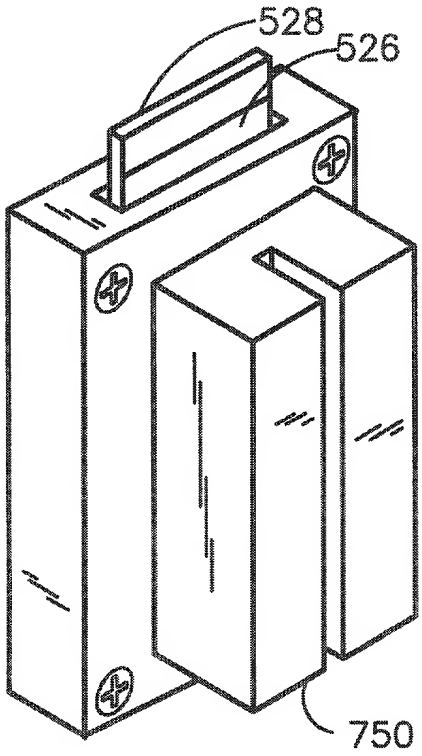
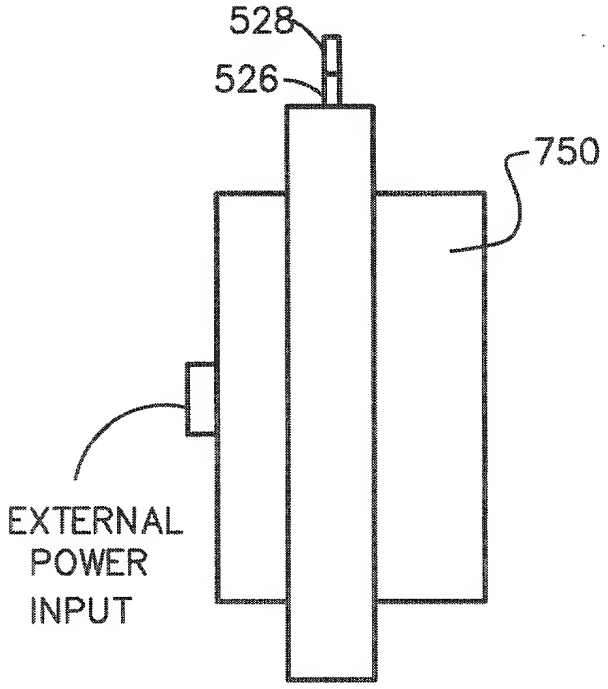


FIG. 33

6,956,450 - 01/25/2005





MAG STRIP READER

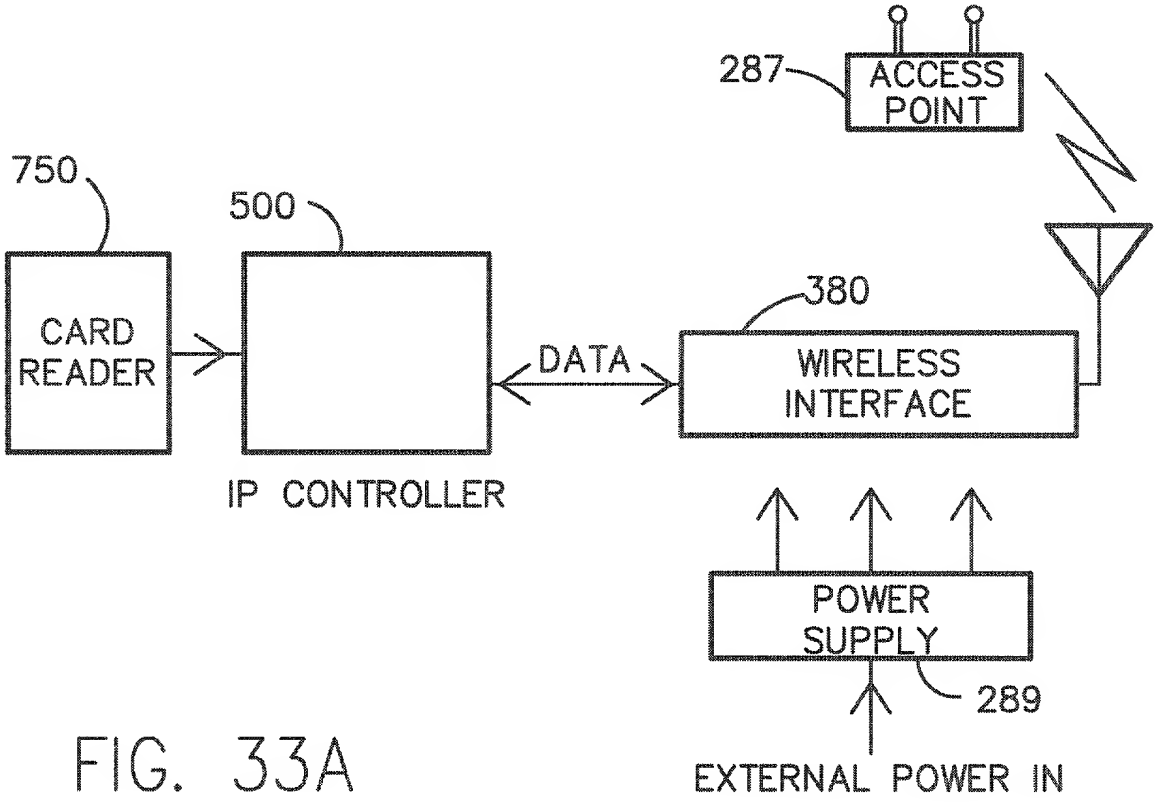
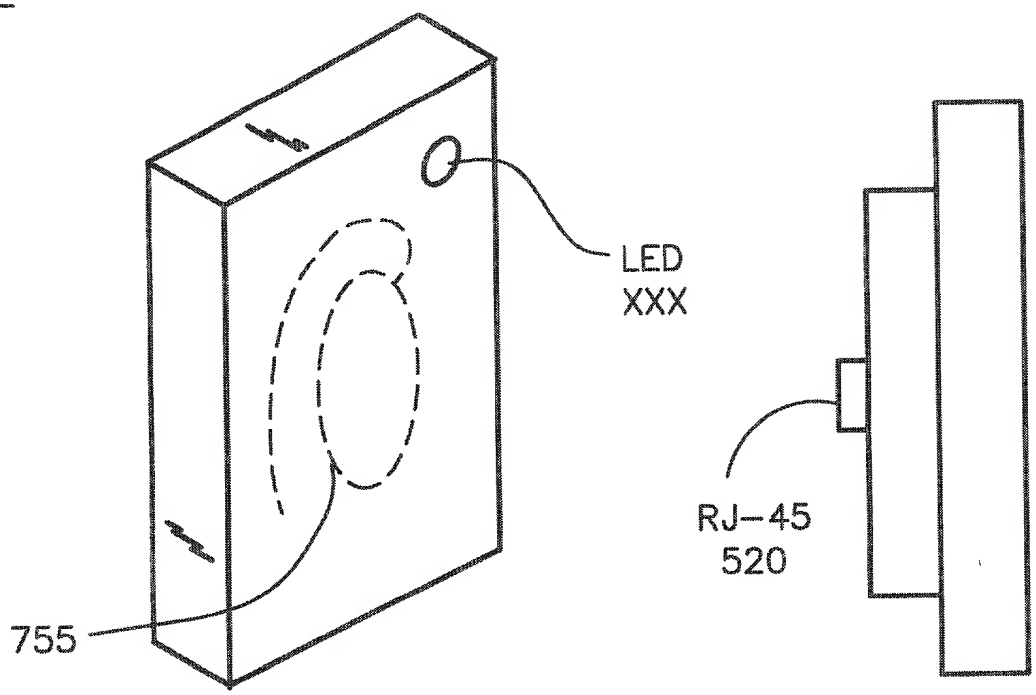


FIG. 33A



PROXIMITY CARD READER

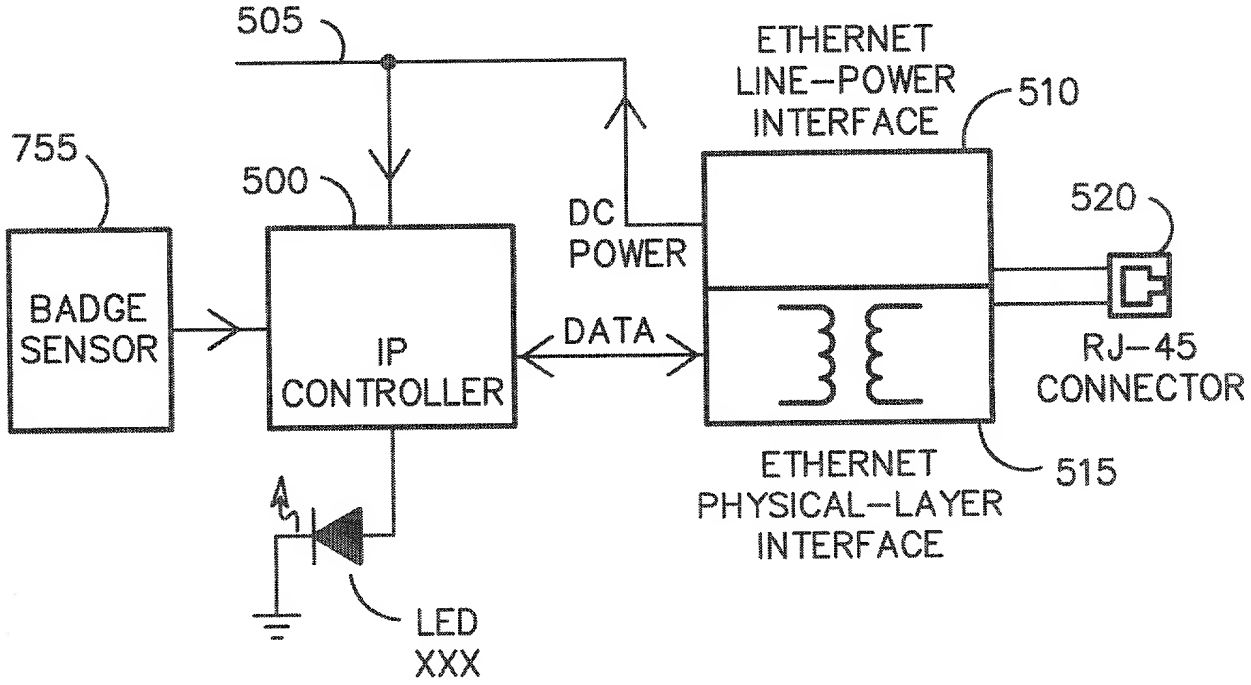
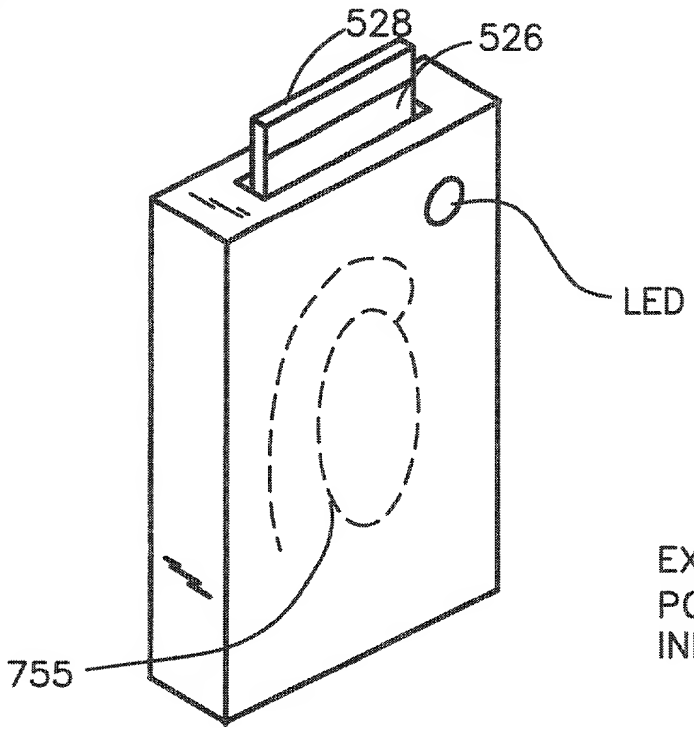
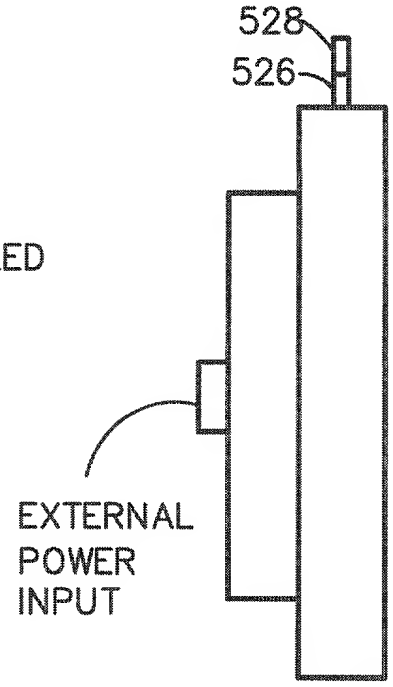


FIG. 34





PROXIMITY CARD READER

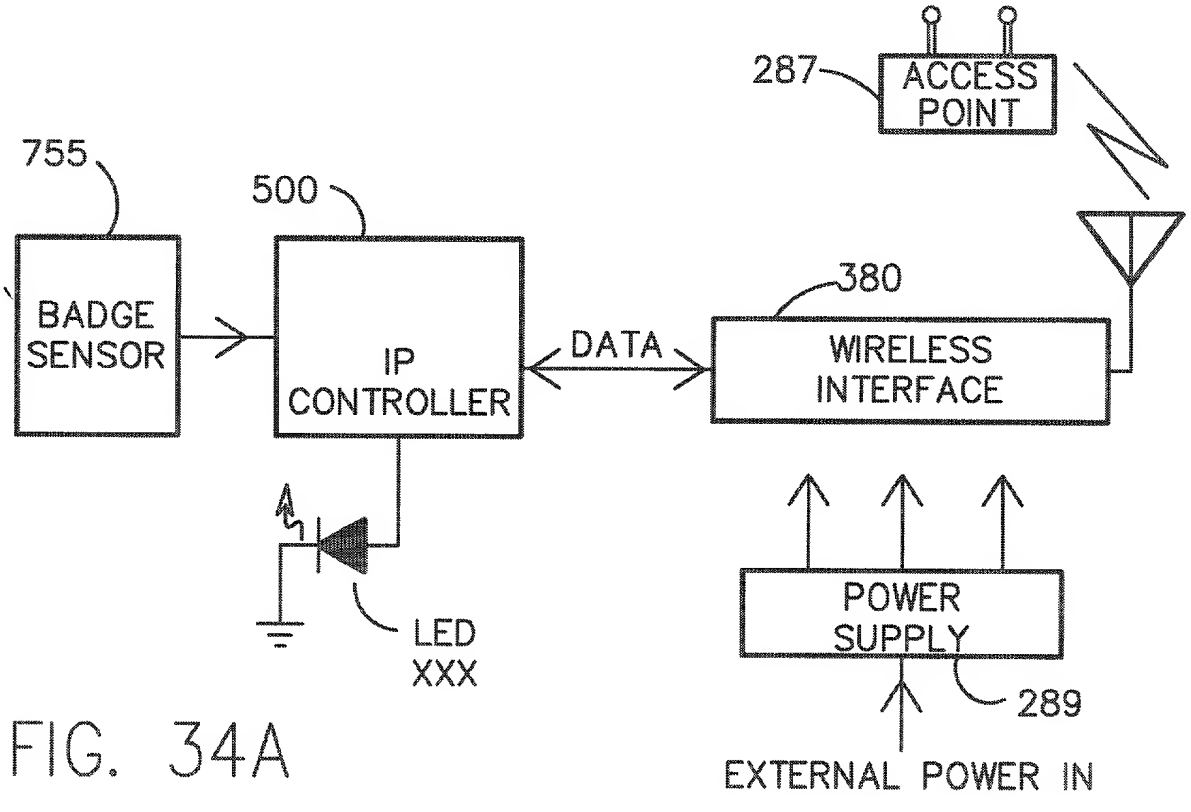


FIG. 34A

09656150-051602

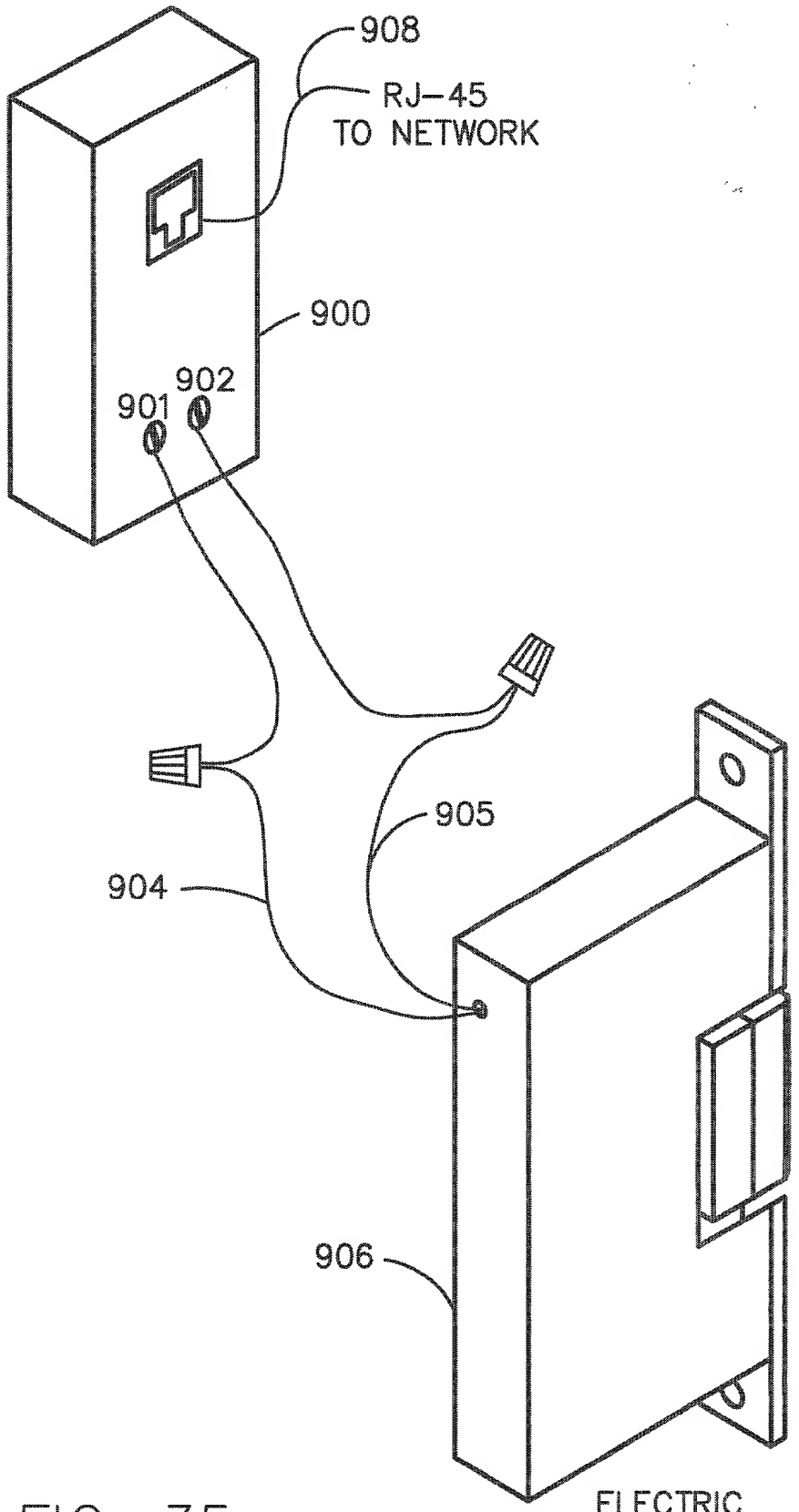


FIG. 35

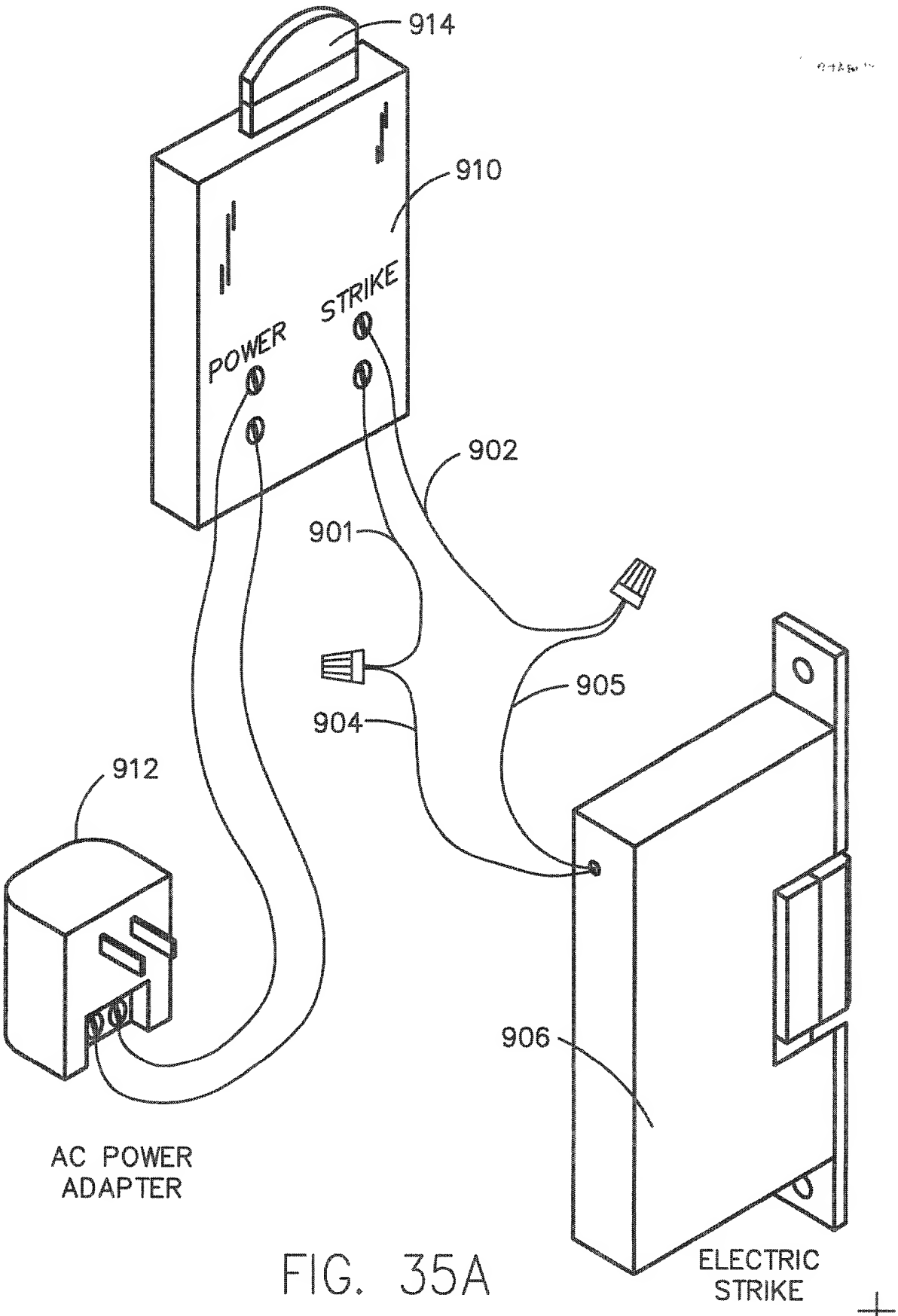

914
910
POWER
STRIKE
902
901
905
904
912
906
AC POWER
ADAPTER
ELECTRIC
STRIKE

FIG. 35A

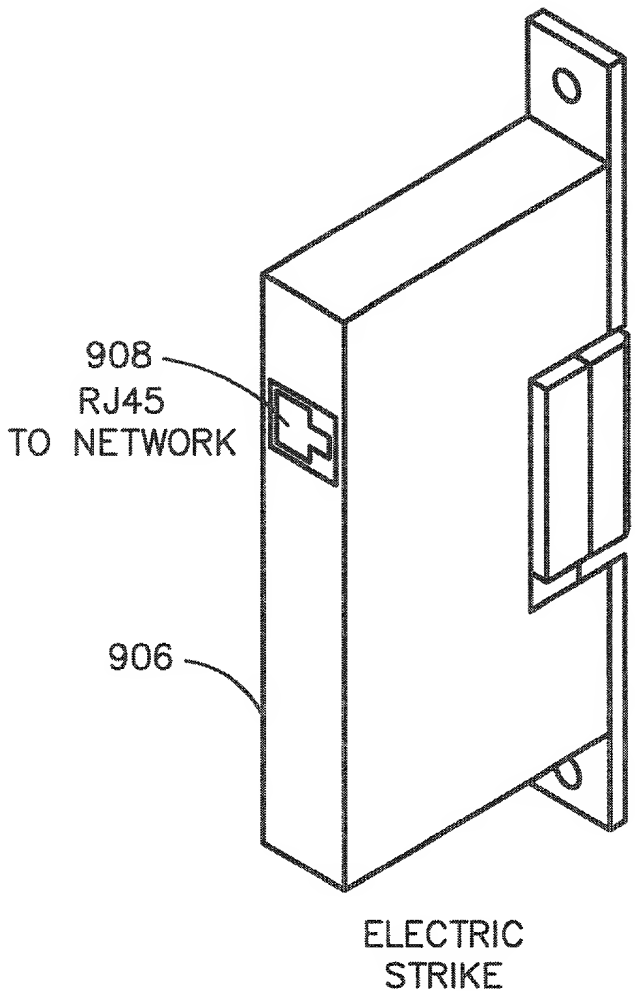


FIG. 35B

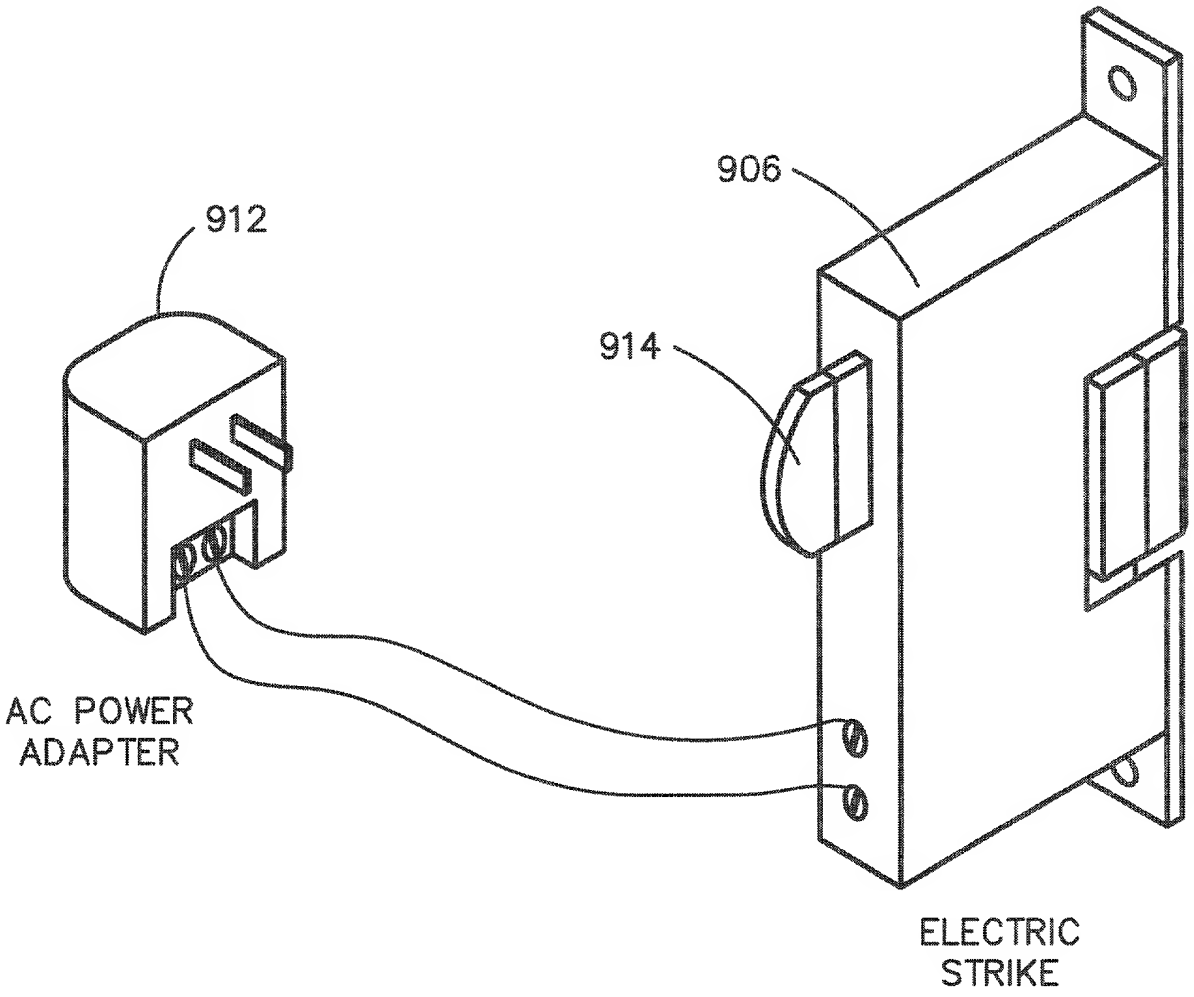


FIG. 35C

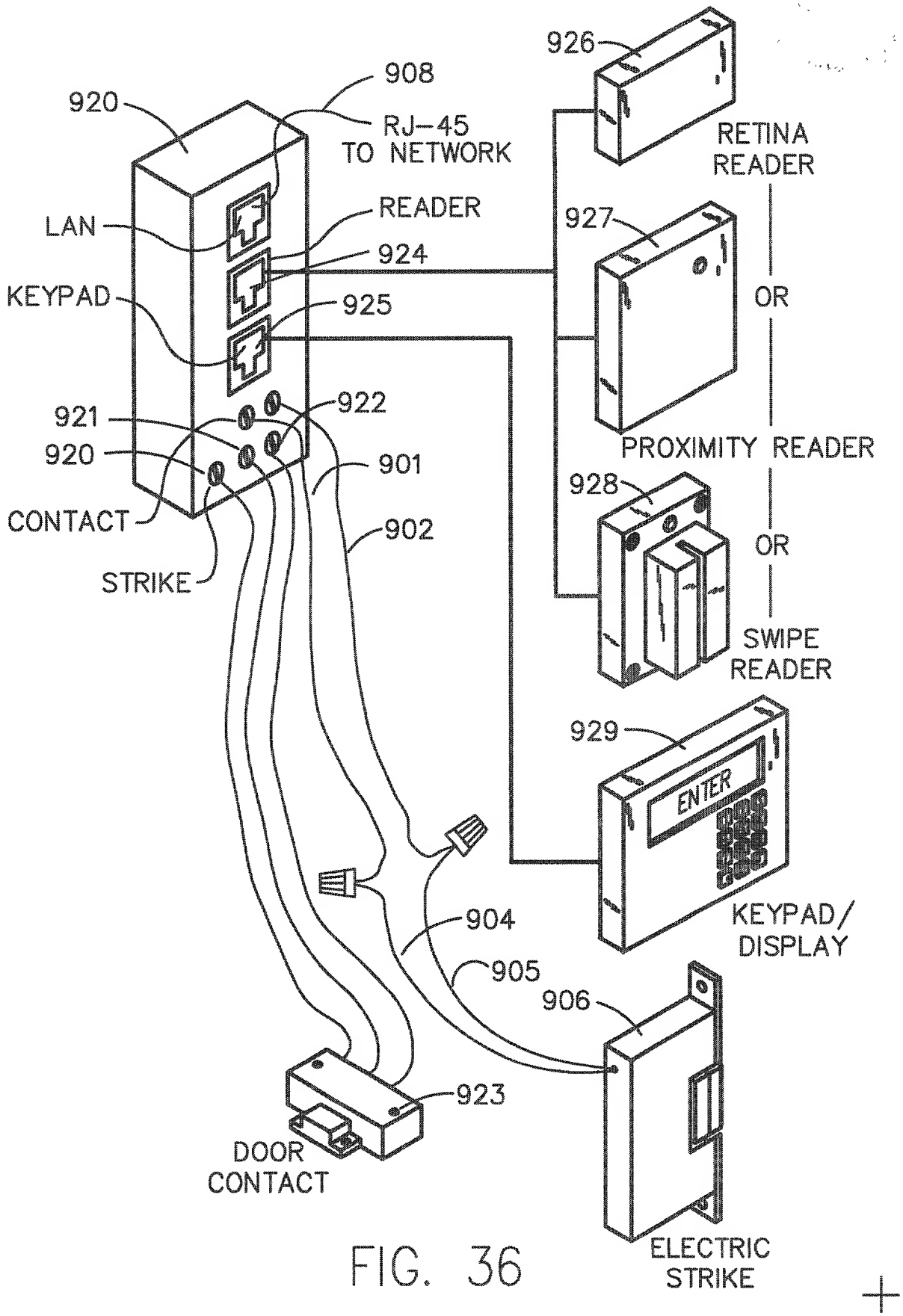

926
908
920
RJ-45
TO NETWORK
RETINA
READER
LAN
READER
927
924
KEYPAD
925
OR
921
922
920
901
PROXIMITY READER
928
CONTACT
902
OR
STRIKE
SWIPE
READER
929
ENTER
904
KEYPAD/
DISPLAY
905
906
923
DOOR
CONTACT
ELECTRIC
STRIKE

FIG. 36

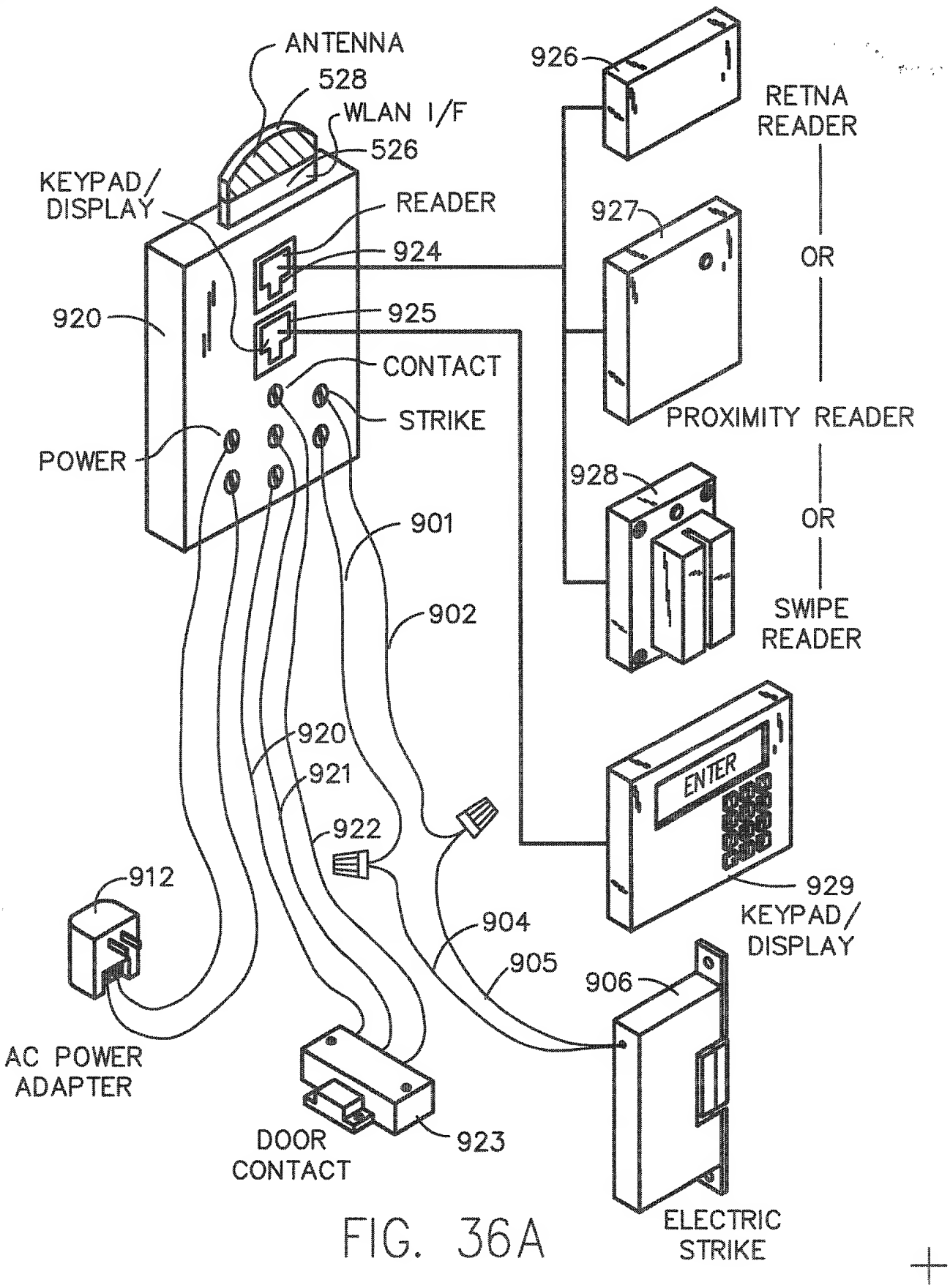

ANTENNA
528
WLAN I/F
526
KEYPAD/
DISPLAY
READER
924
925
920
CONTACT
STRIKE
POWER
926
RETNA
READER
927
OR
PROXIMITY READER
928
OR
SWIPE
READER
901
902
920
921
922
912
ENTER
929
KEYPAD/
DISPLAY
904
905
906
AC POWER
ADAPTER
DOOR
CONTACT
923
ELECTRIC
STRIKE

FIG. 36A

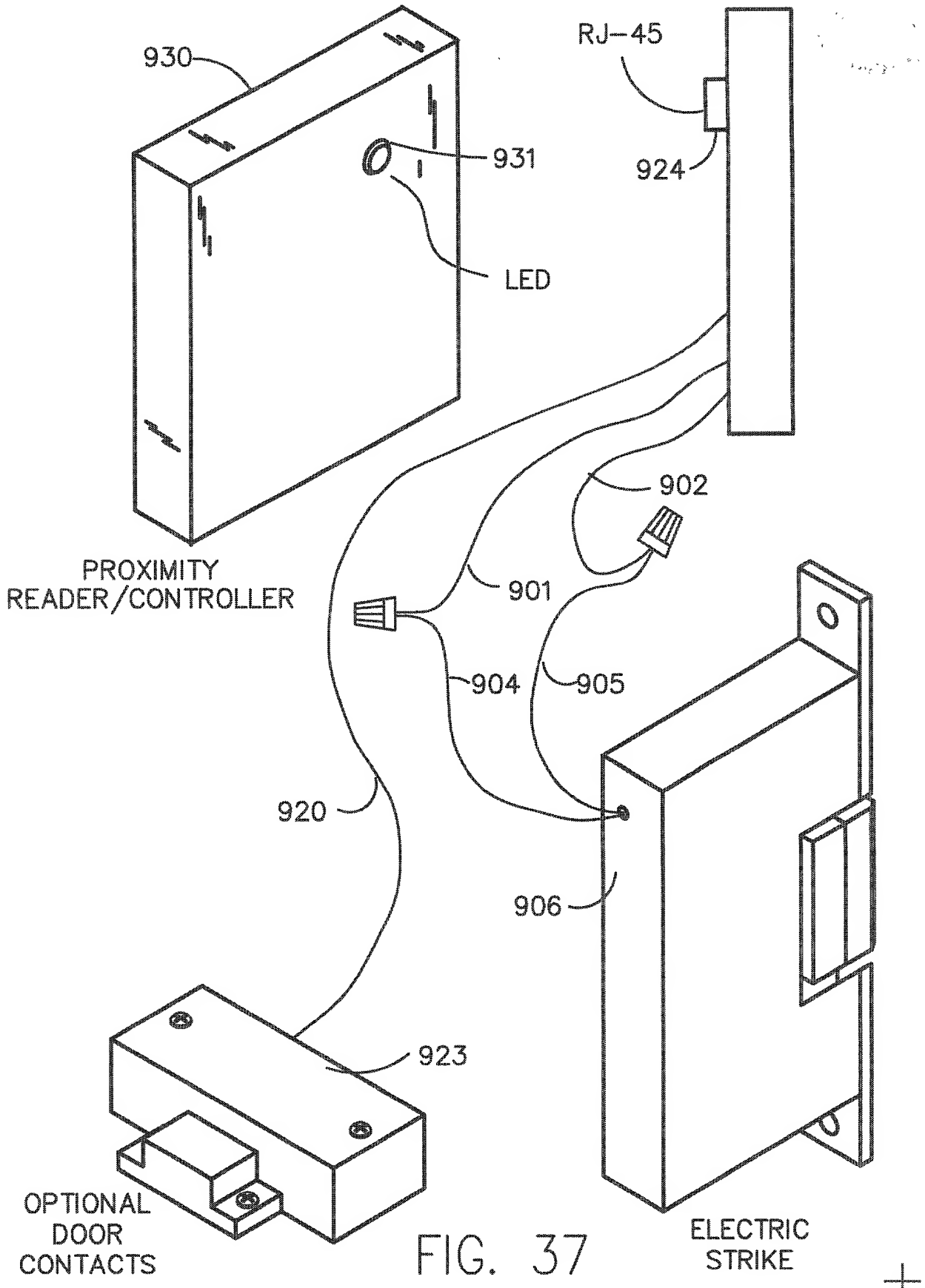

930
931
LED
RJ-45
924
902
901
904
905
920
906
923
PROXIMITY
READER/CONTROLLER
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 37

20080104-0015950

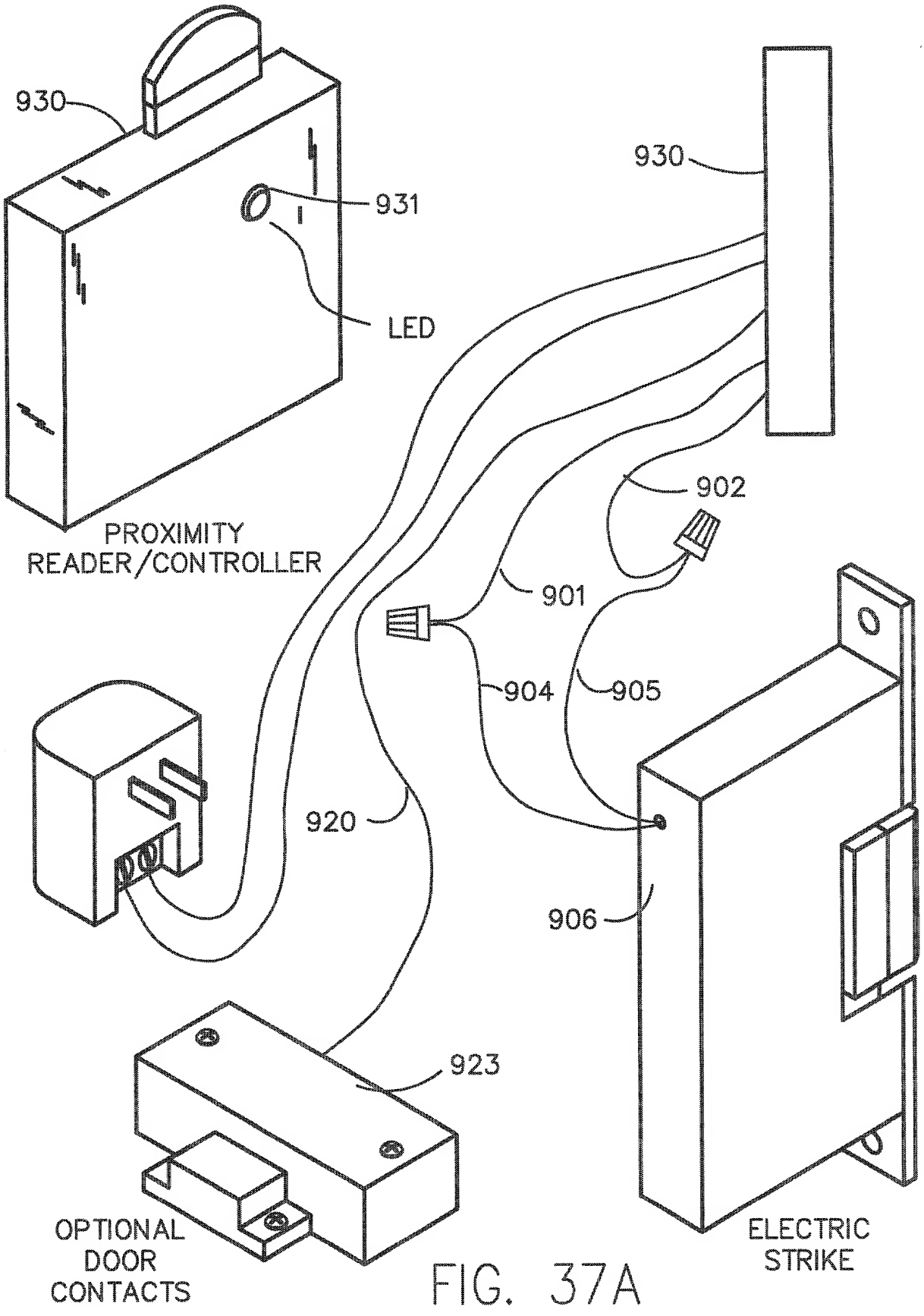


FIG. 37A

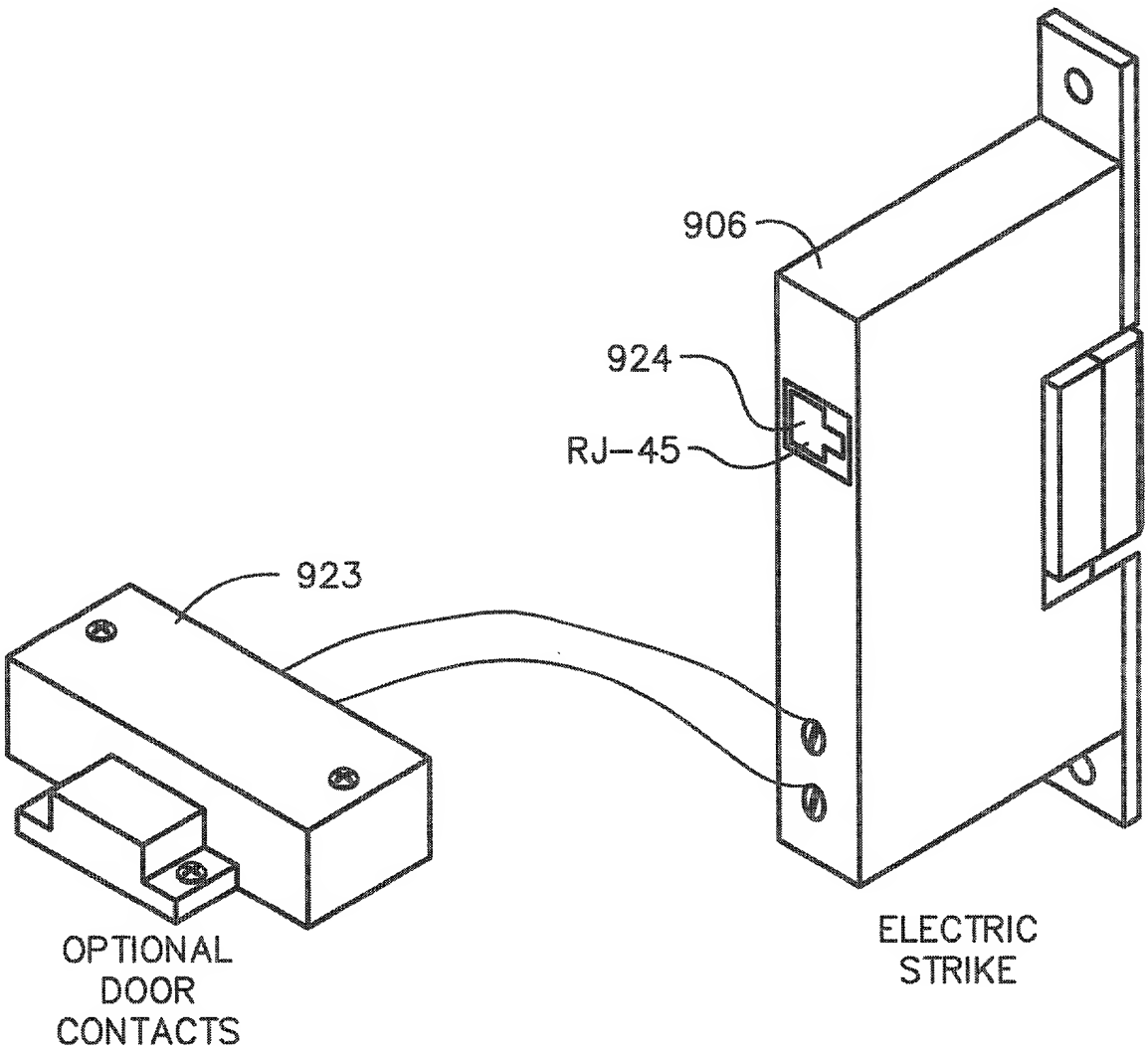


FIG. 37B

6656450 070602

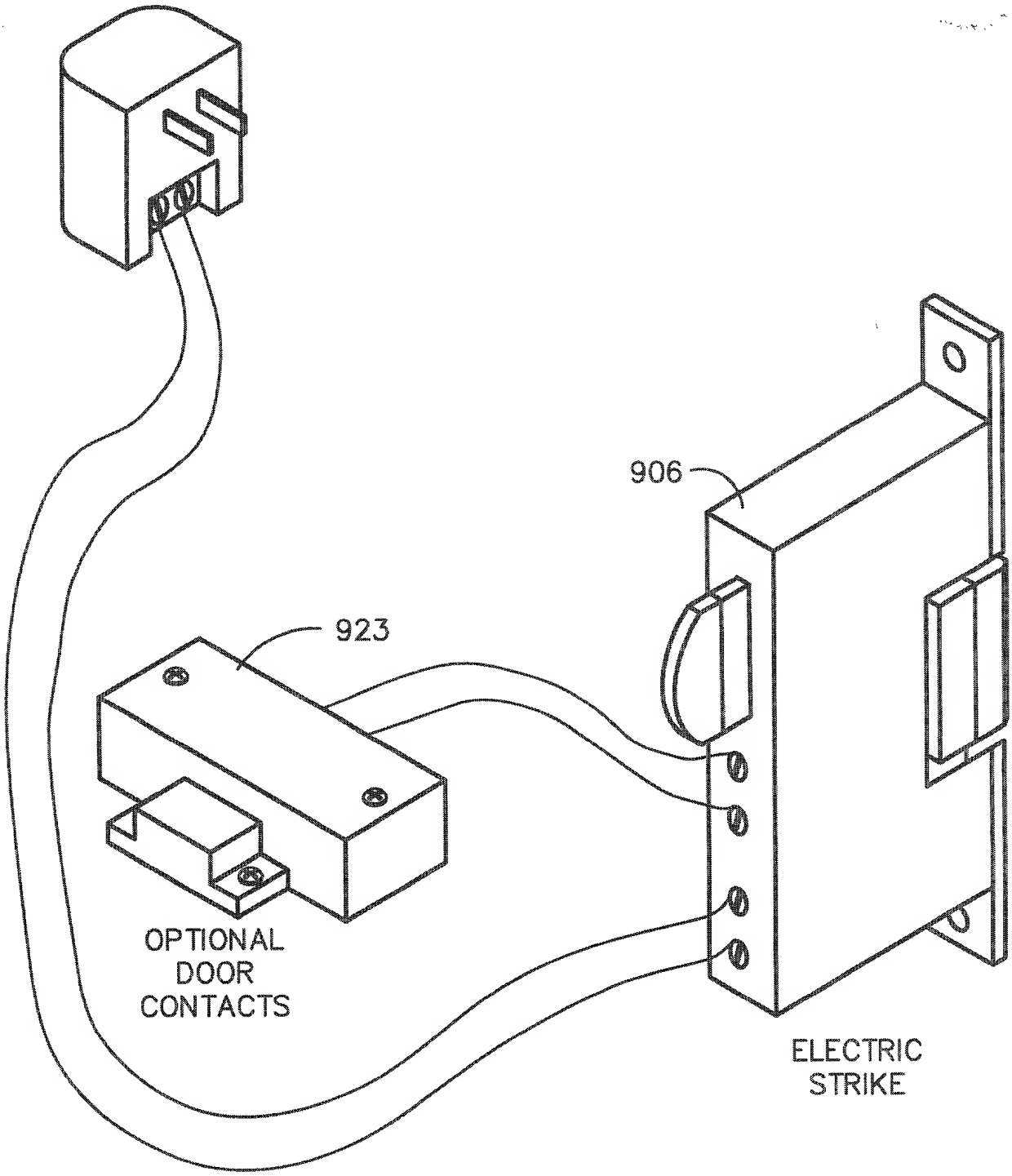


FIG. 37C

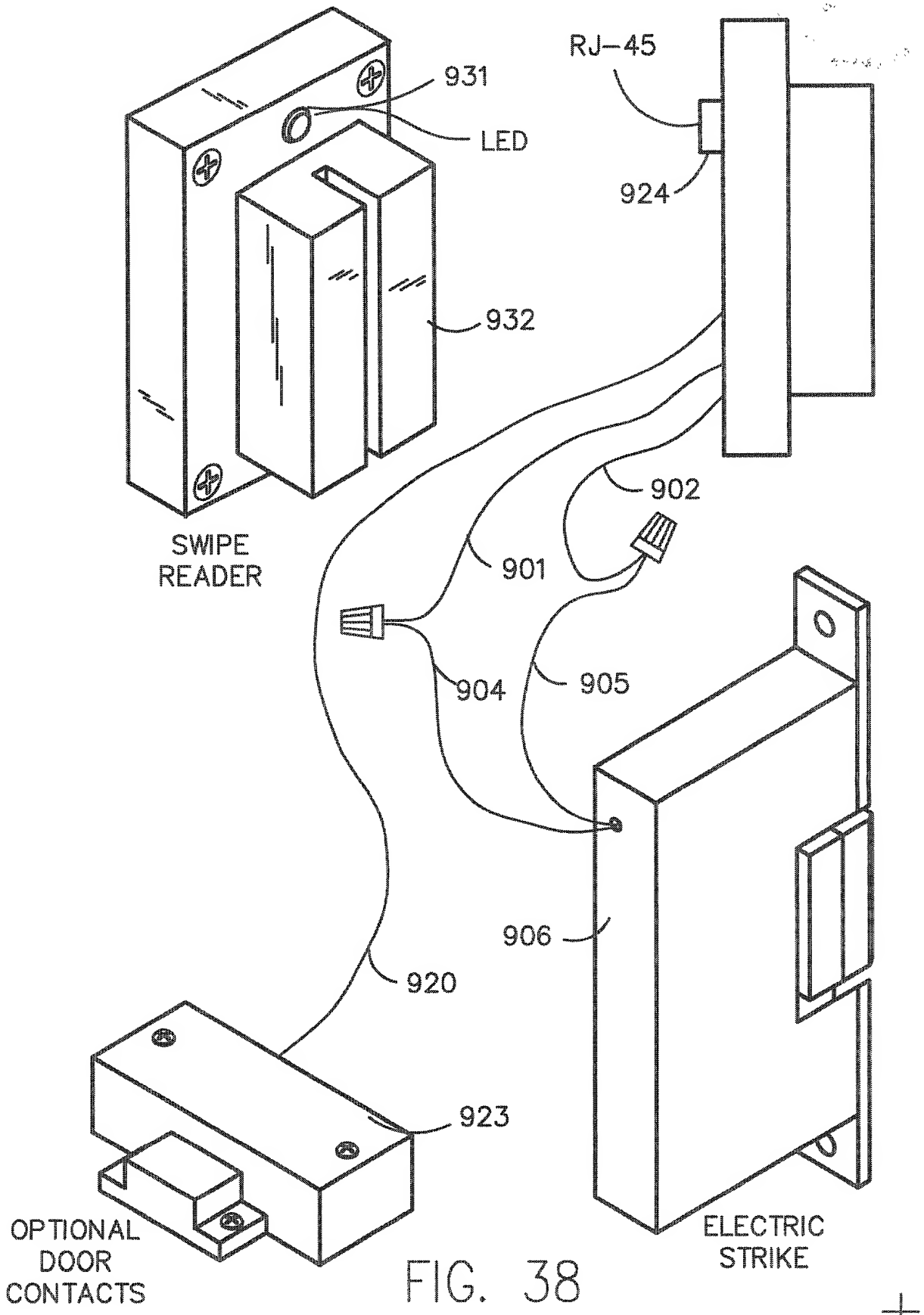

RJ-45
931
LED
924
932
902
SWIPE
READER
901
904
905
906
920
923
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 38

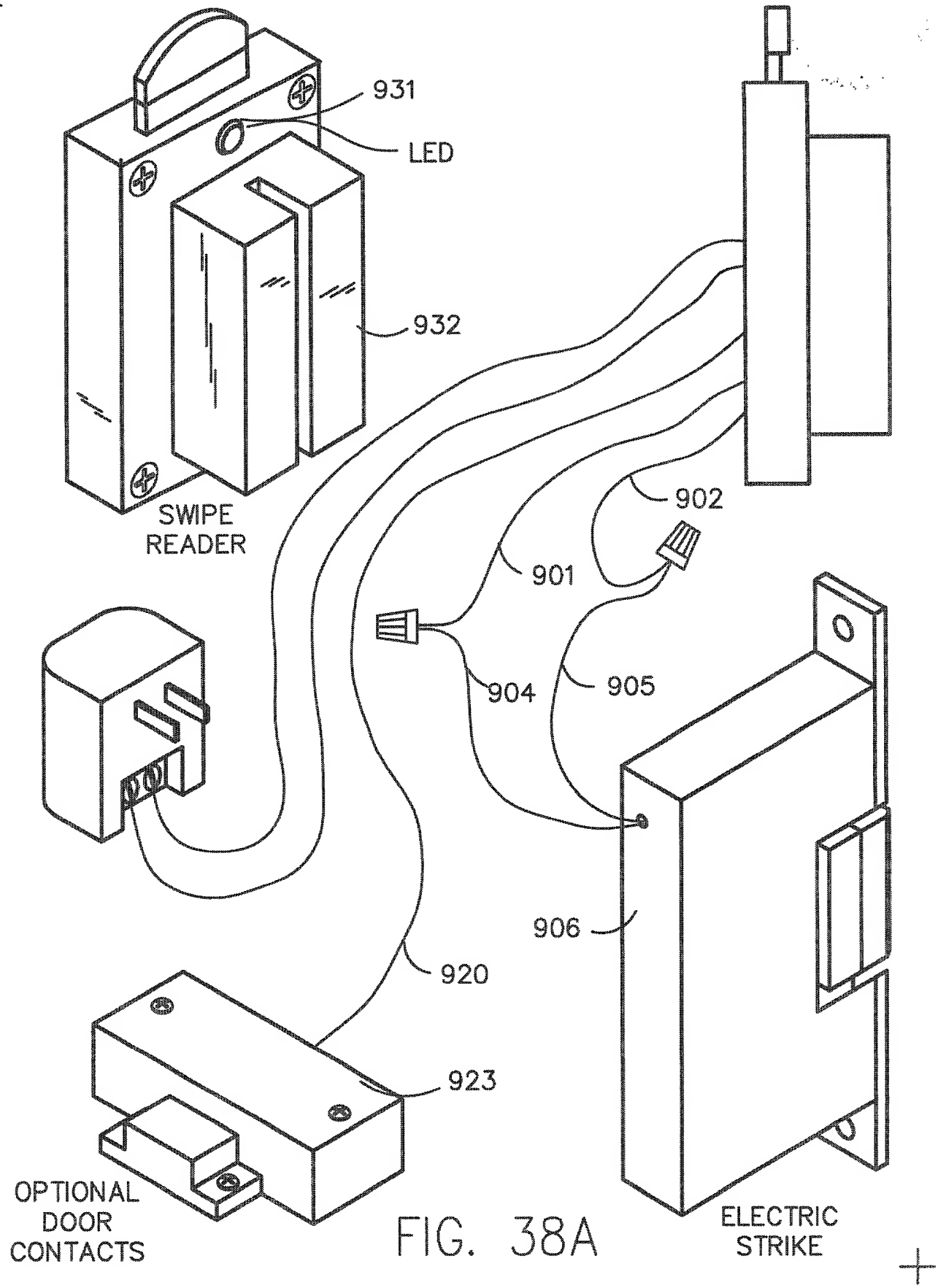

931
LED
932
SWIPE
READER
902
901
904
905
906
920
923
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 38A

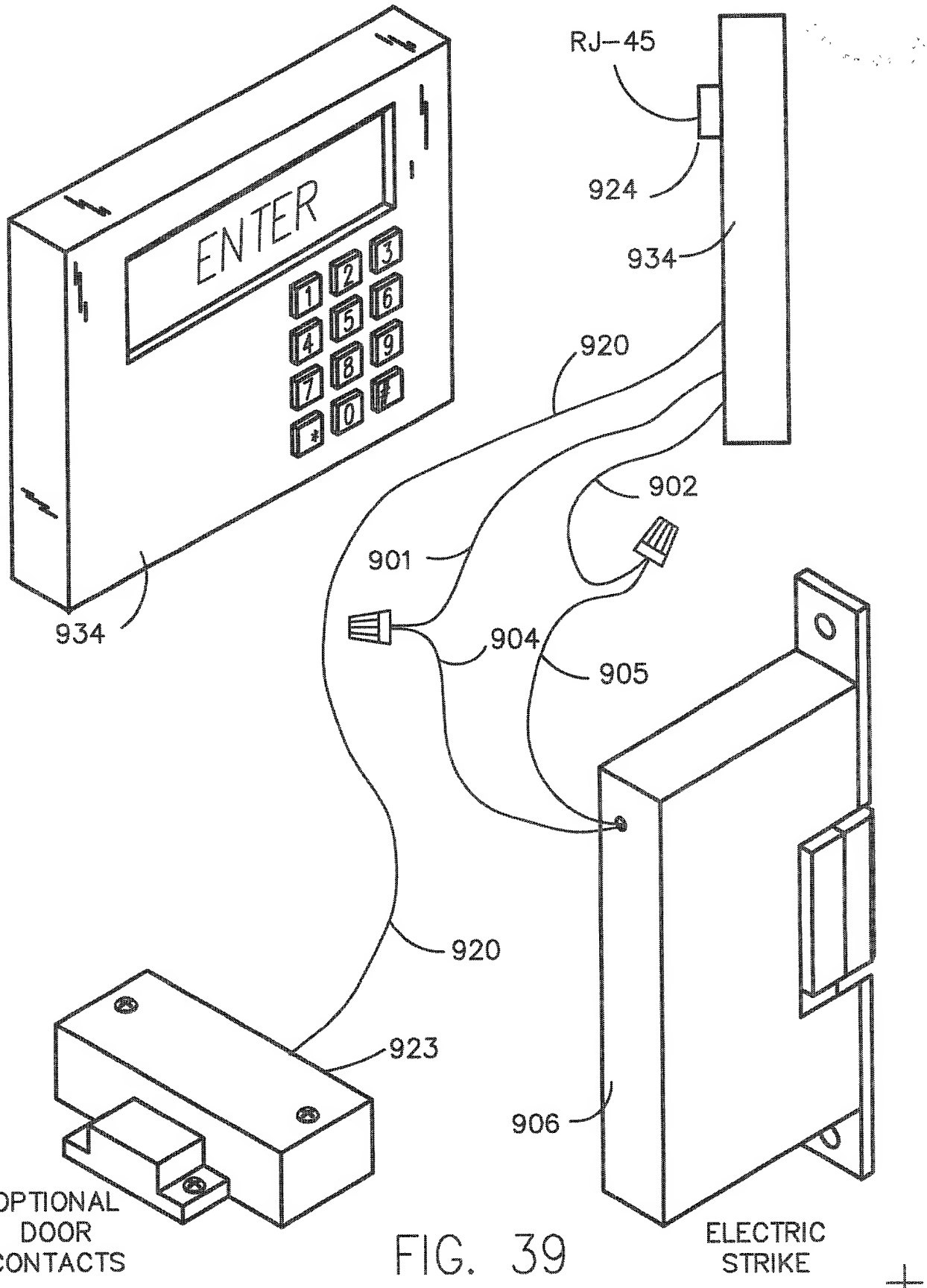


FIG. 39

US 6,956,950 B2

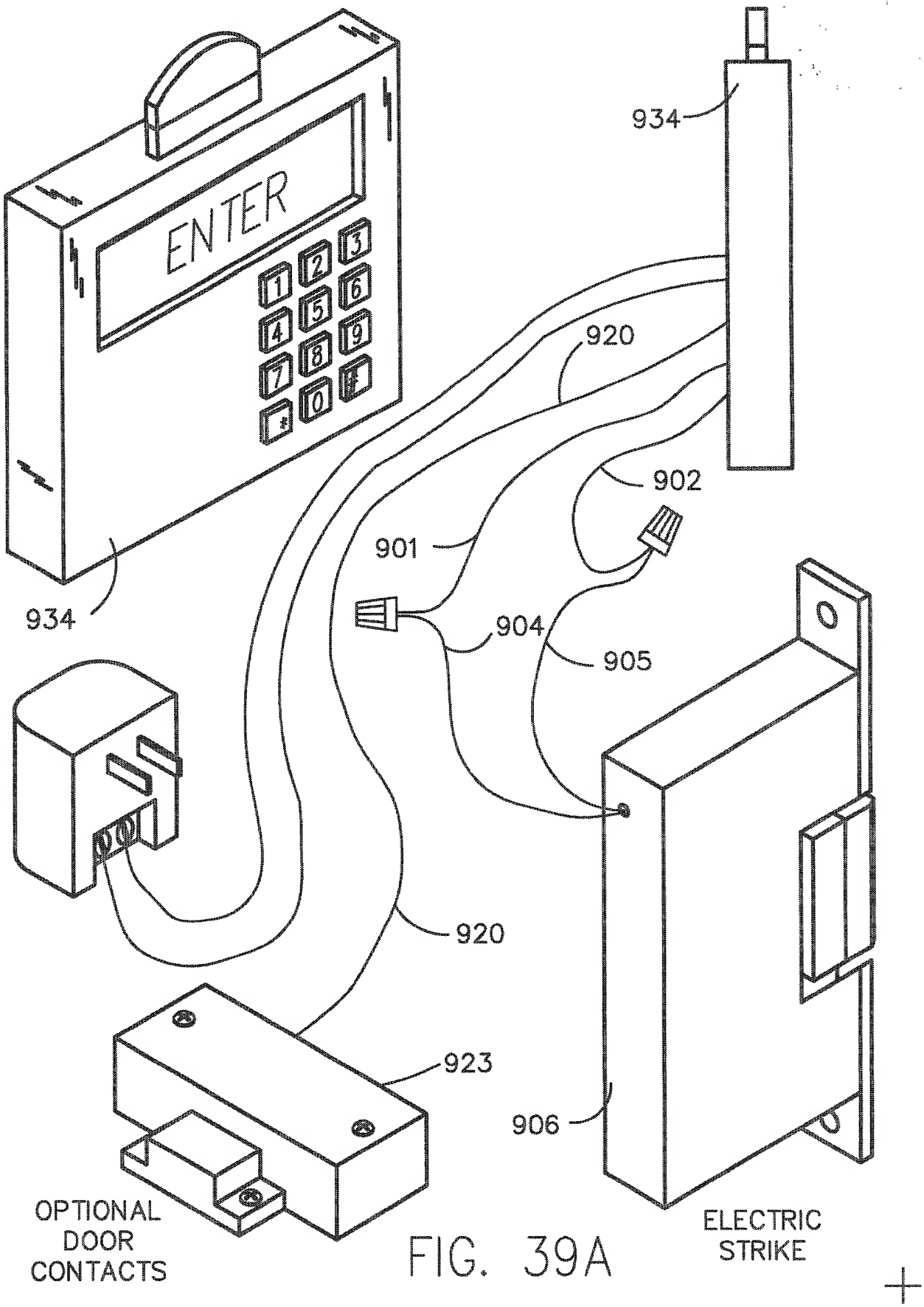

ENTER
1
2
3
4
5
6
7
8
9
*
0
#
934
920
902
901
904
905
934
920
923
906
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 39A

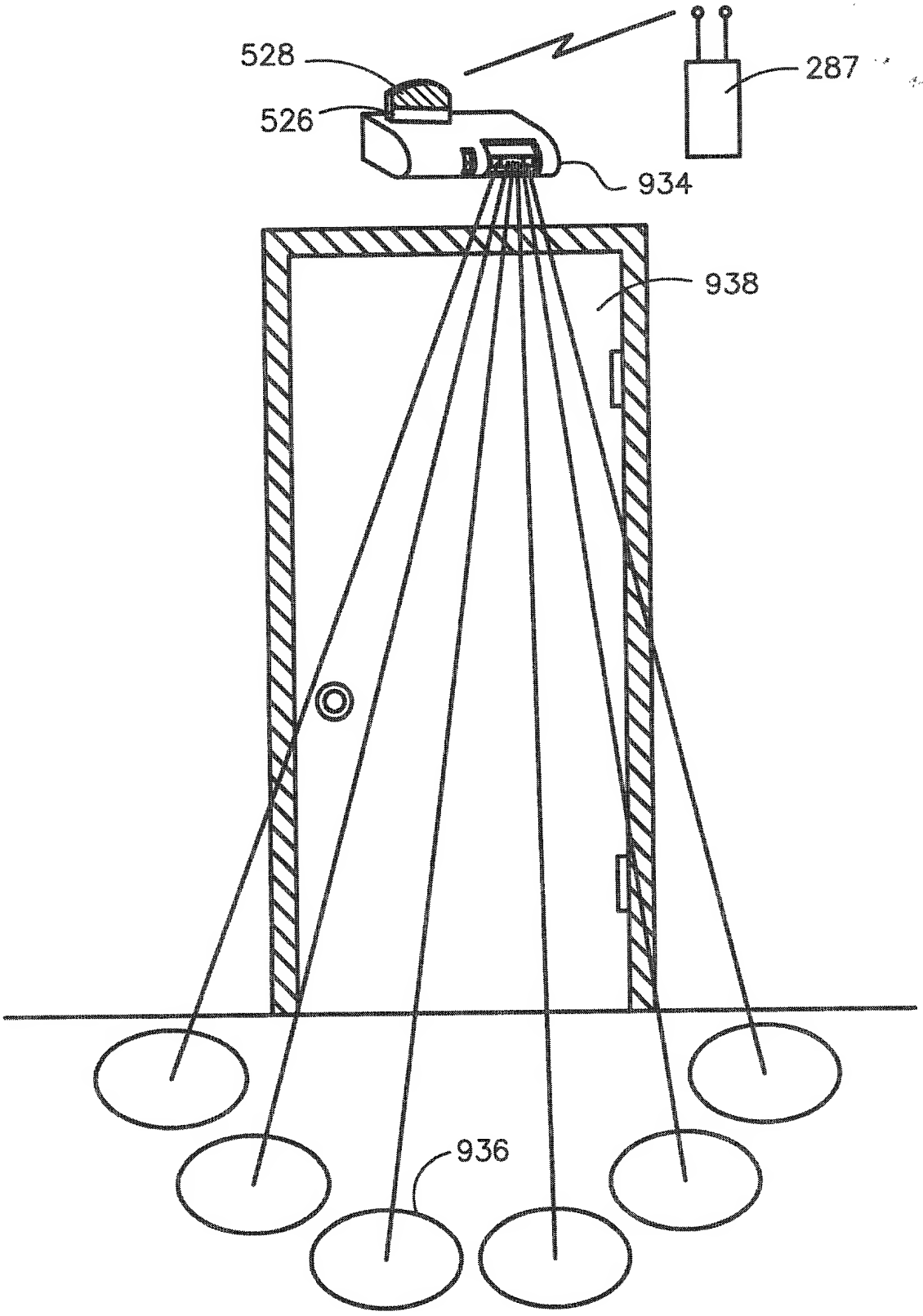
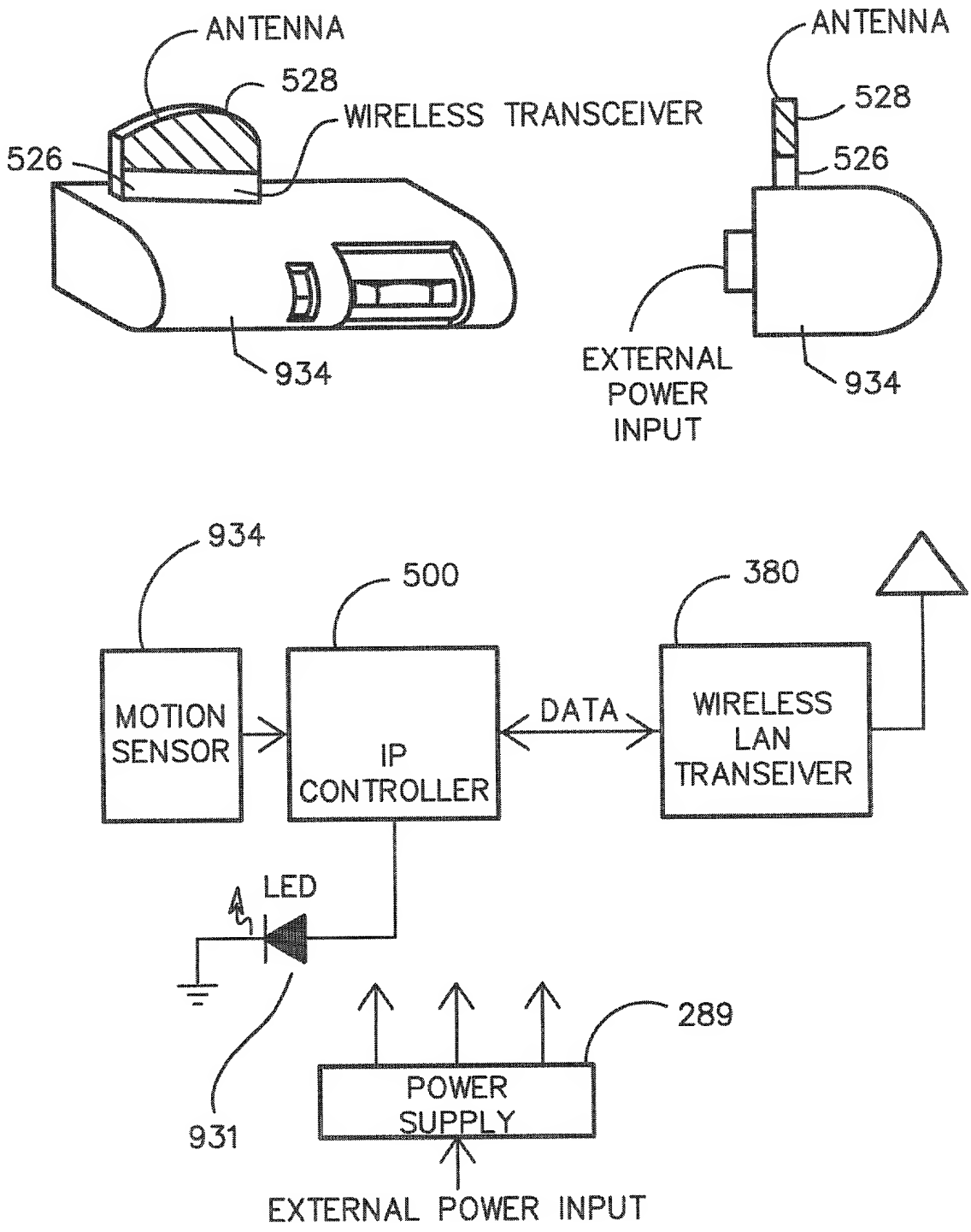
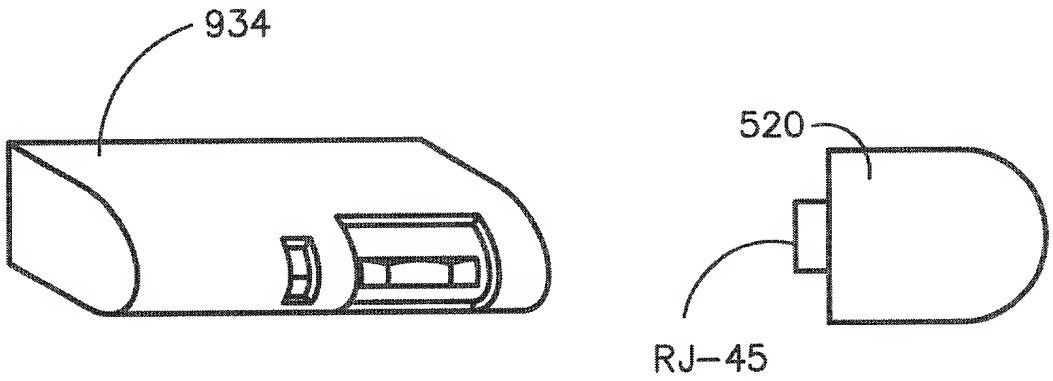


FIG. 40



WIRELESS EXIT SENSOR

FIG. 40A


934
520
RJ-45

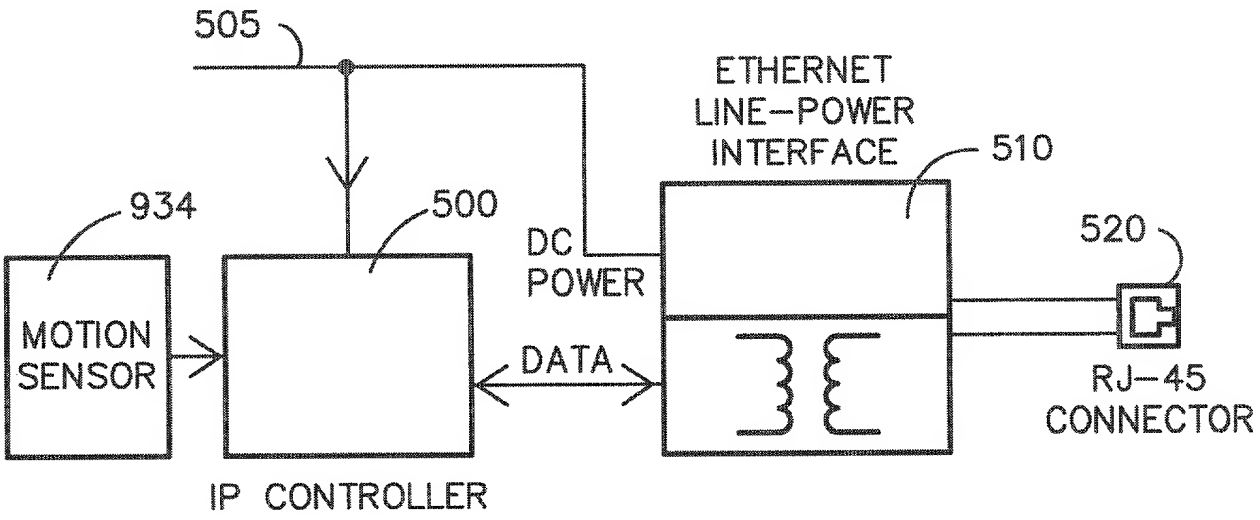

505
ETHERNET
LINE-POWER
INTERFACE
510
934
500
520
DC
POWER
MOTION
SENSOR
DATA
RJ-45
CONNECTOR
IP CONTROLLER

FIG. 40B

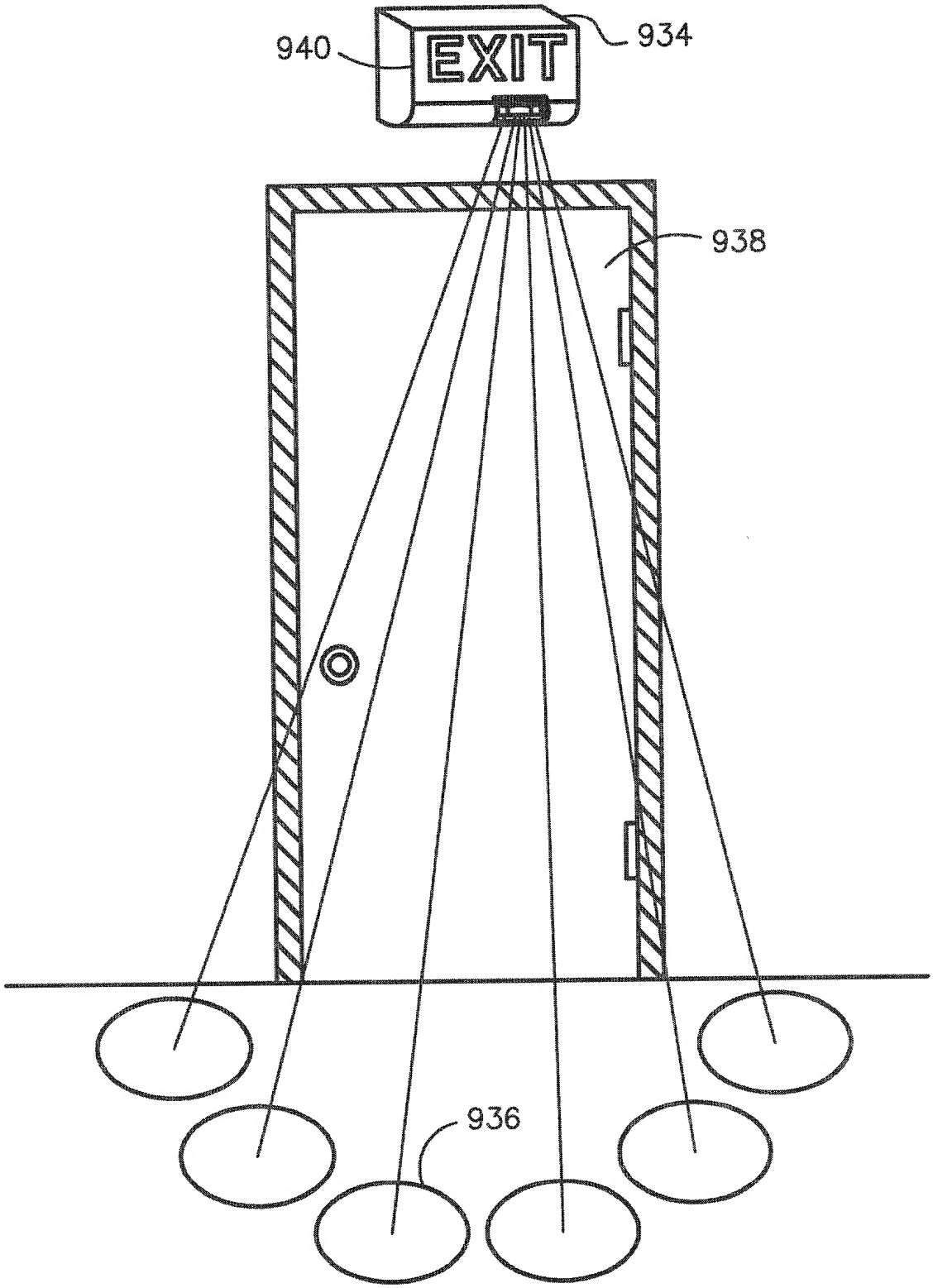


FIG. 40C

05651310 - 041902

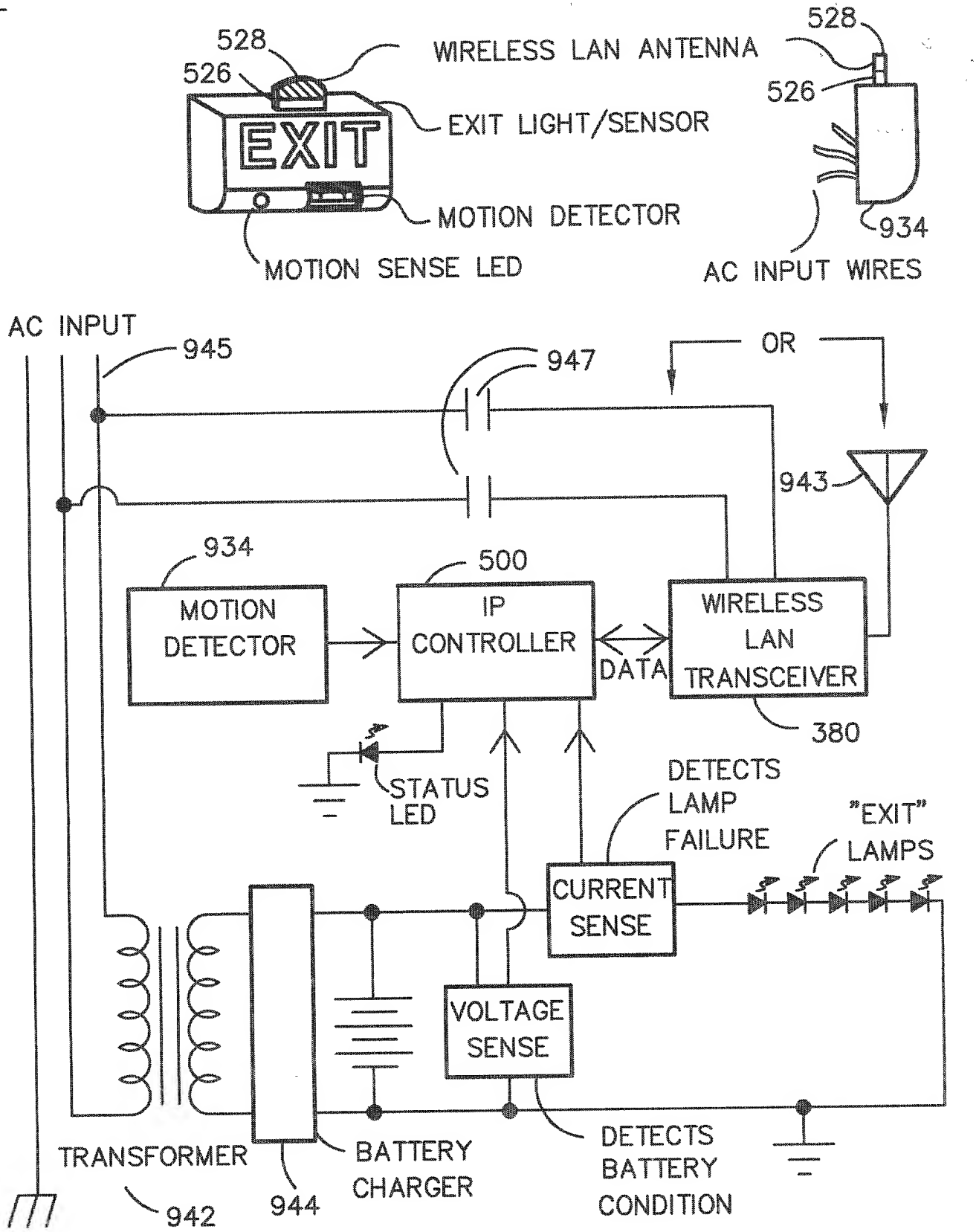

528
526
WIRELESS LAN ANTENNA
EXIT LIGHT/SENSOR
MOTION DETECTOR
MOTION SENSE LED
EXIT
528
526
934
AC INPUT WIRES
AC INPUT
945
947
OR
943
934
MOTION DETECTOR
500
IP CONTROLLER
DATA
WIRELESS LAN TRANSCEIVER
380
STATUS LED
DETECTS LAMP FAILURE
"EXIT" LAMPS
CURRENT SENSE
VOLTAGE SENSE
TRANSFORMER
942
944
BATTERY CHARGER
DETECTS BATTERY CONDITION

FIG. 40D

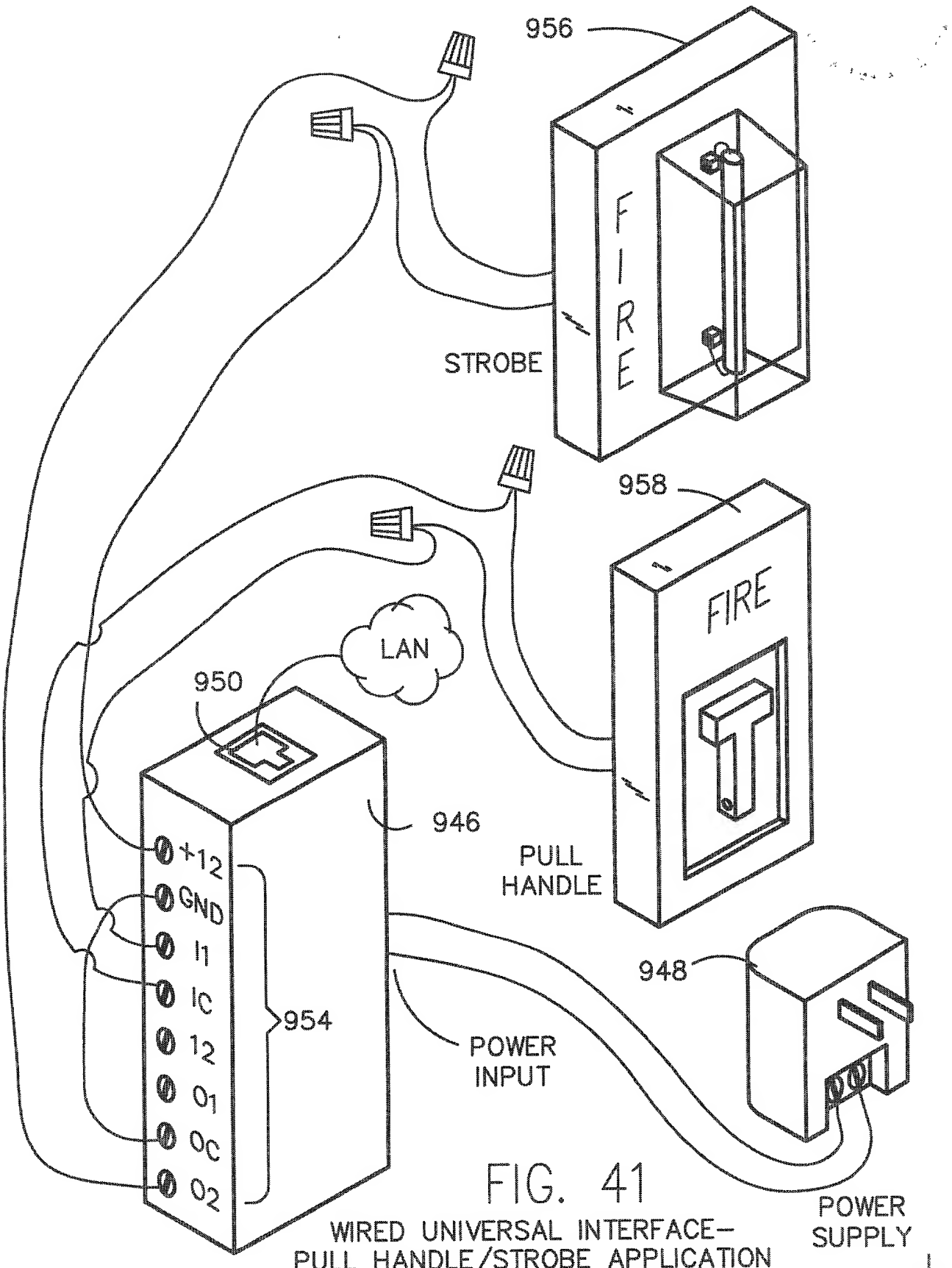


FIG. 41

WIRED UNIVERSAL INTERFACE–
PULL HANDLE/STROBE APPLICATION

D956,520 - 10/08/05

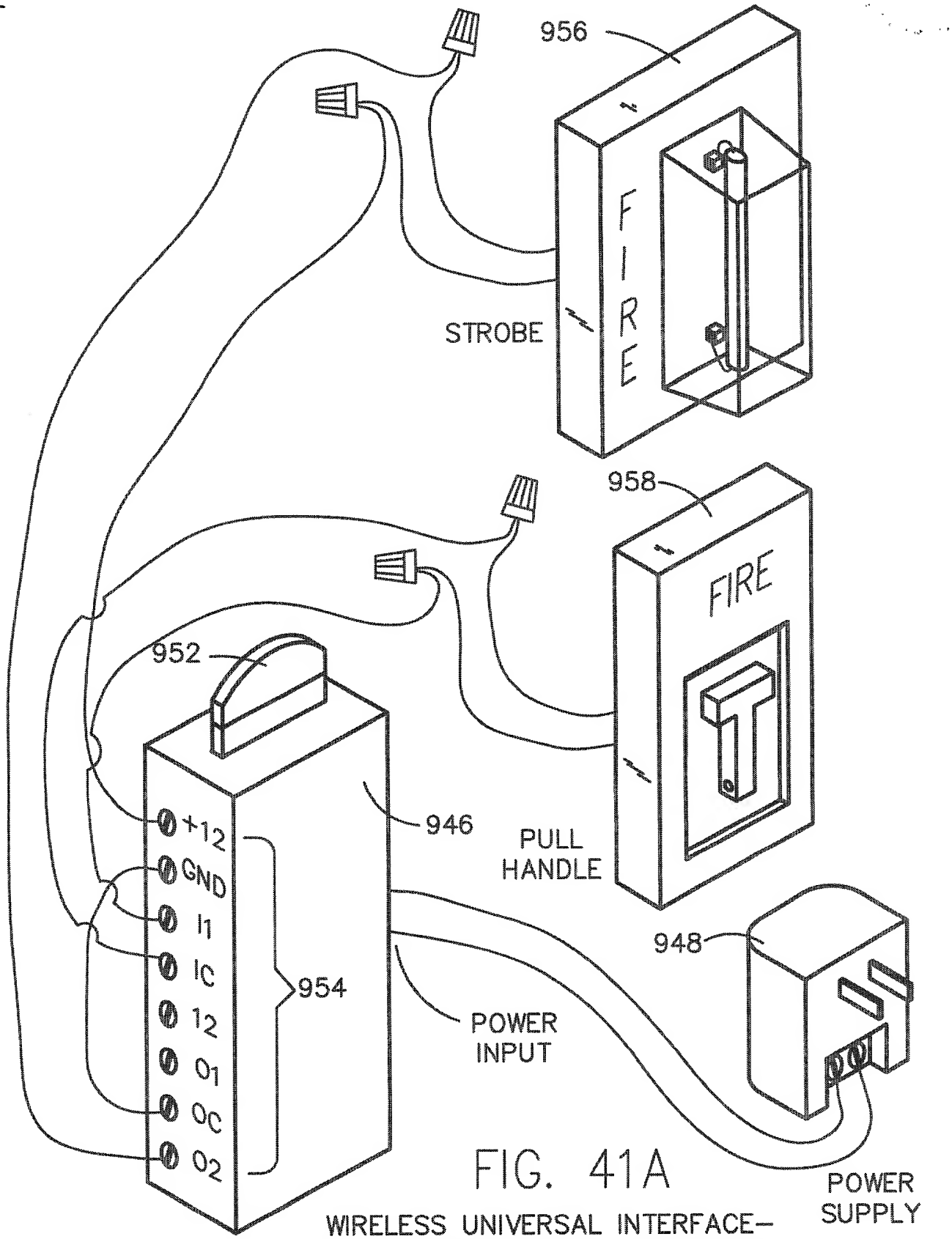
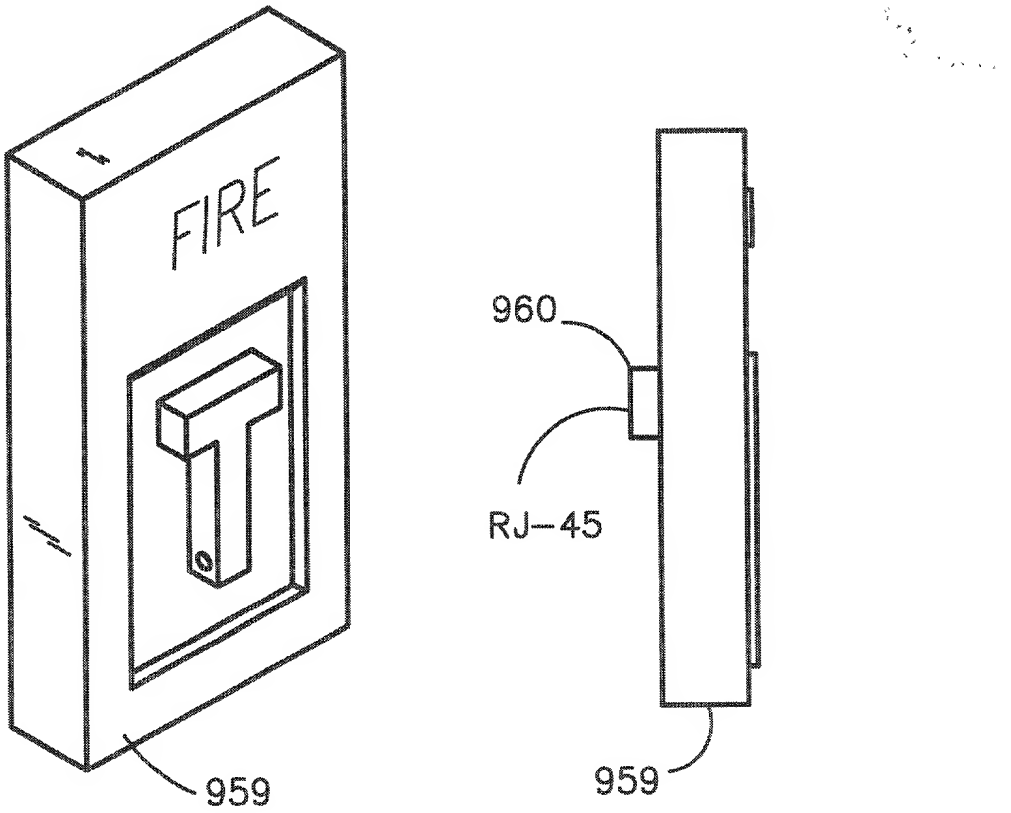


FIG. 41A

WIRELESS UNIVERSAL INTERFACE–
PULL HANDLE/STROBE APPLICATION

D596150 "D596150S2



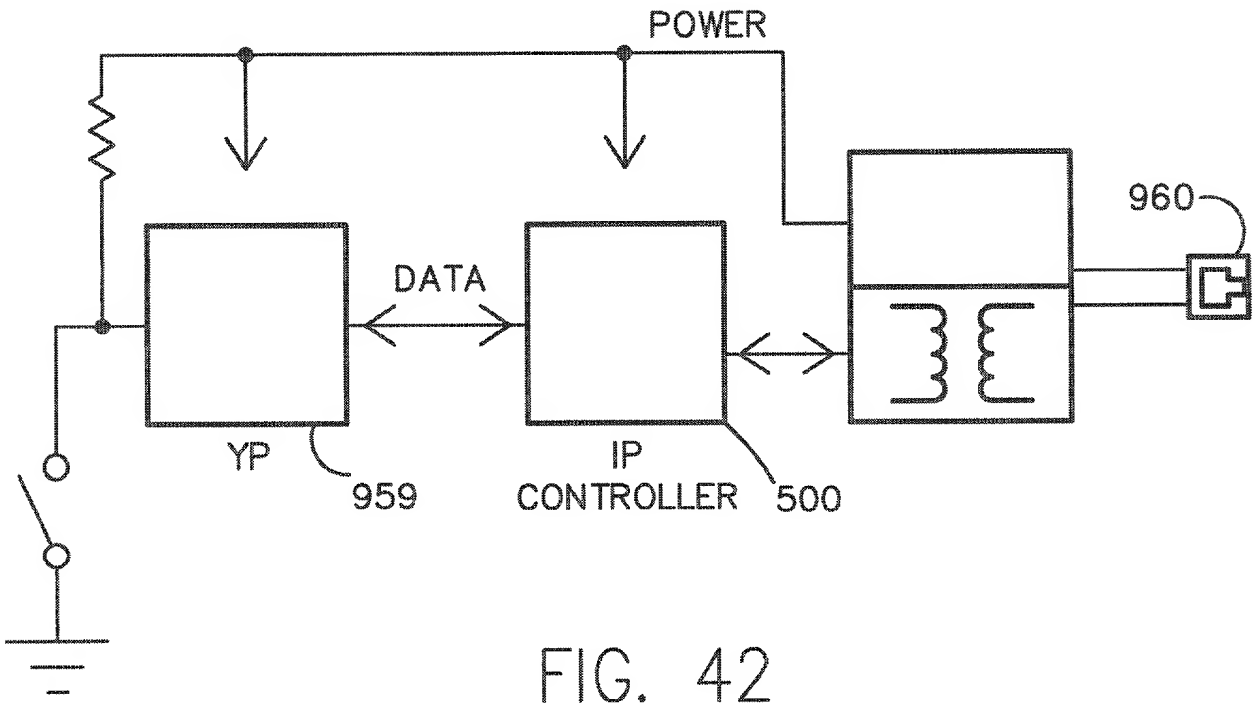
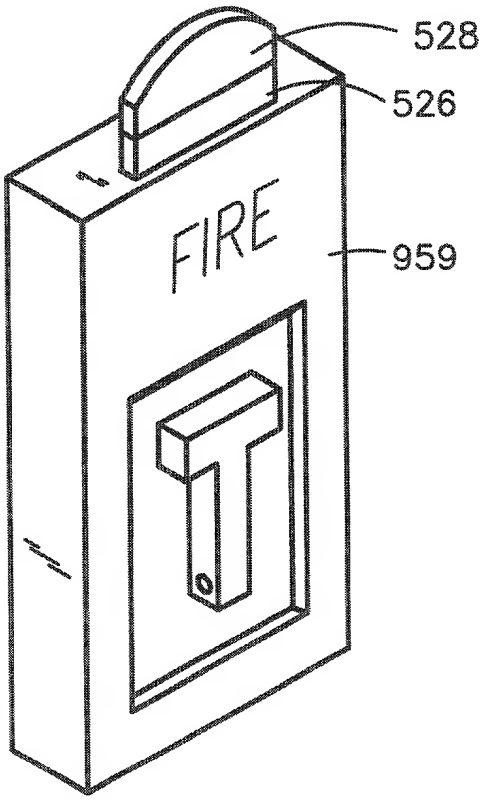
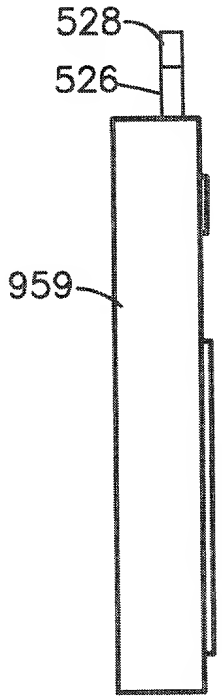


FIG. 42

WIRED PULL HANDLE





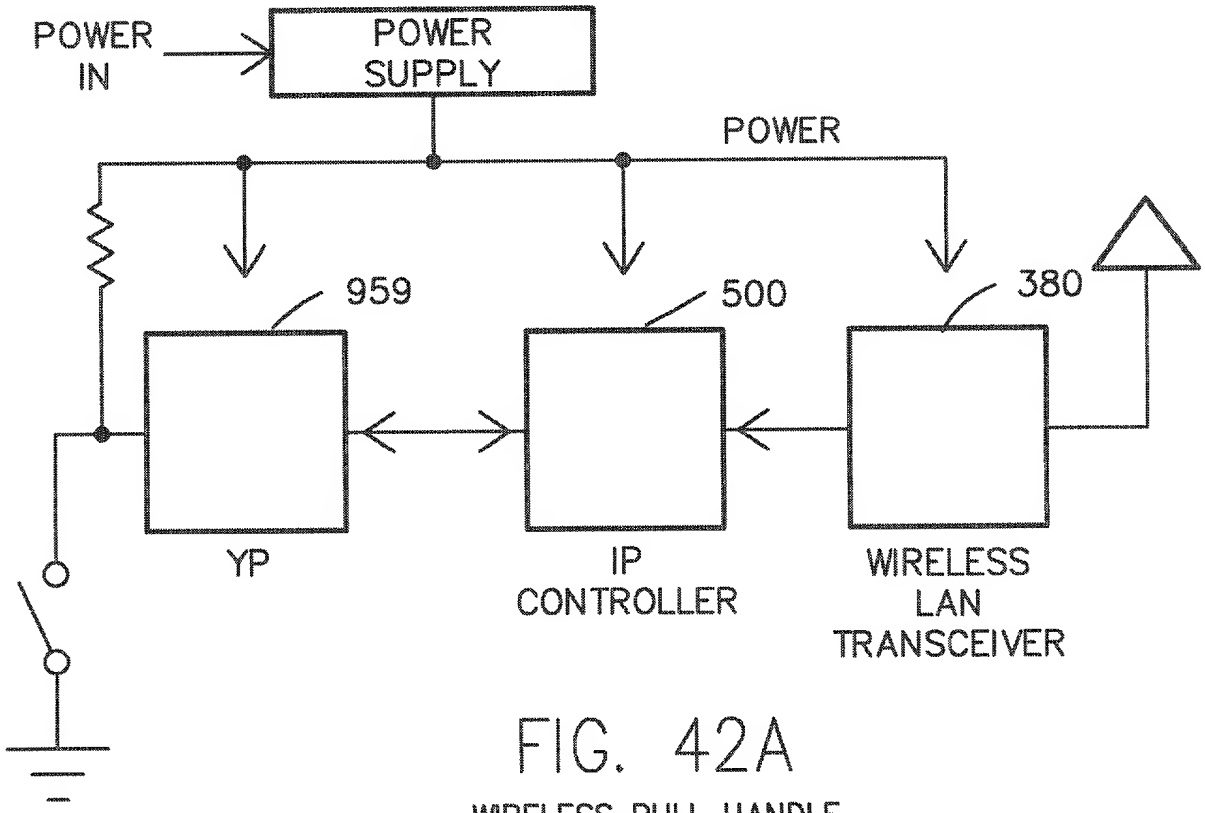
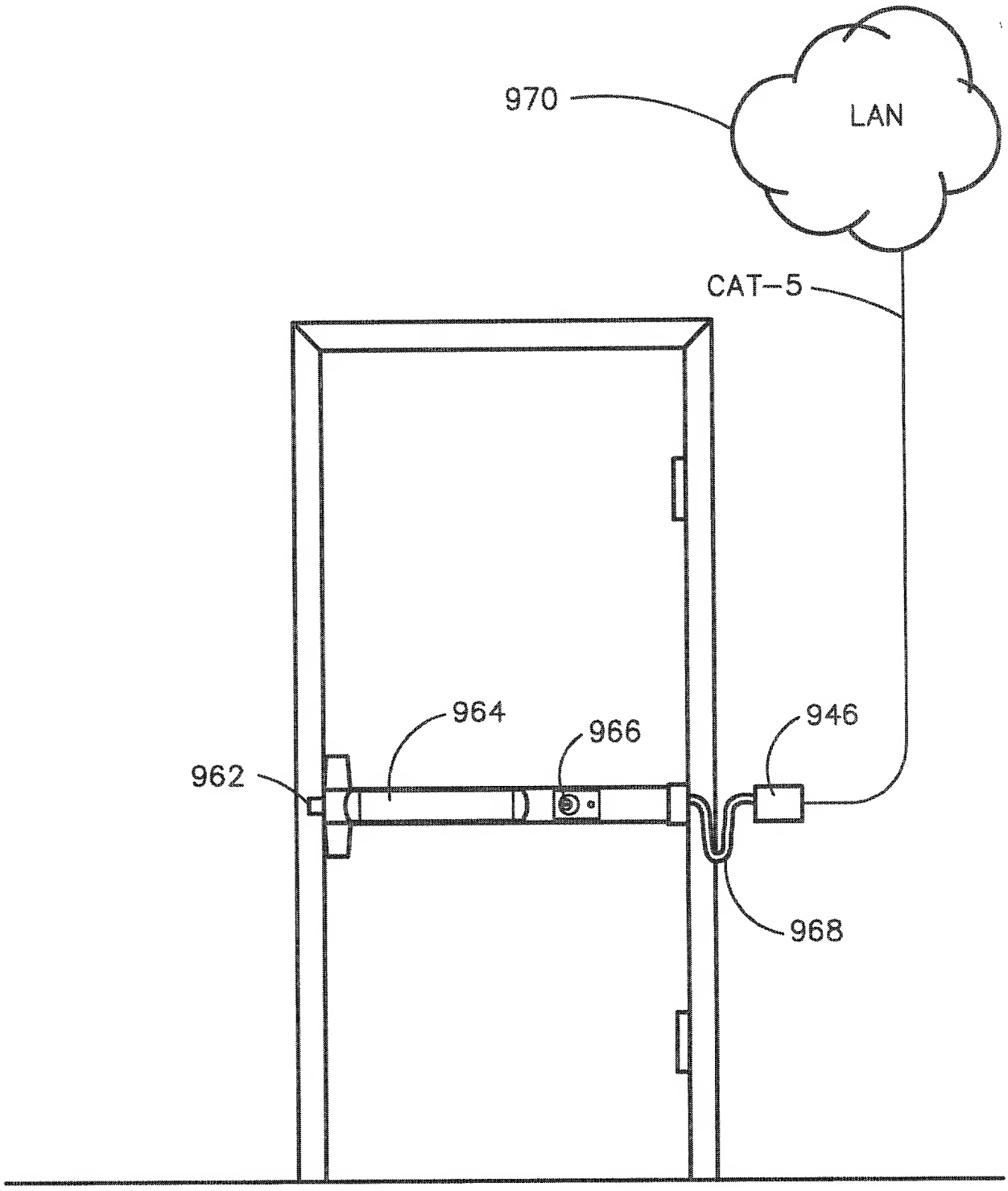


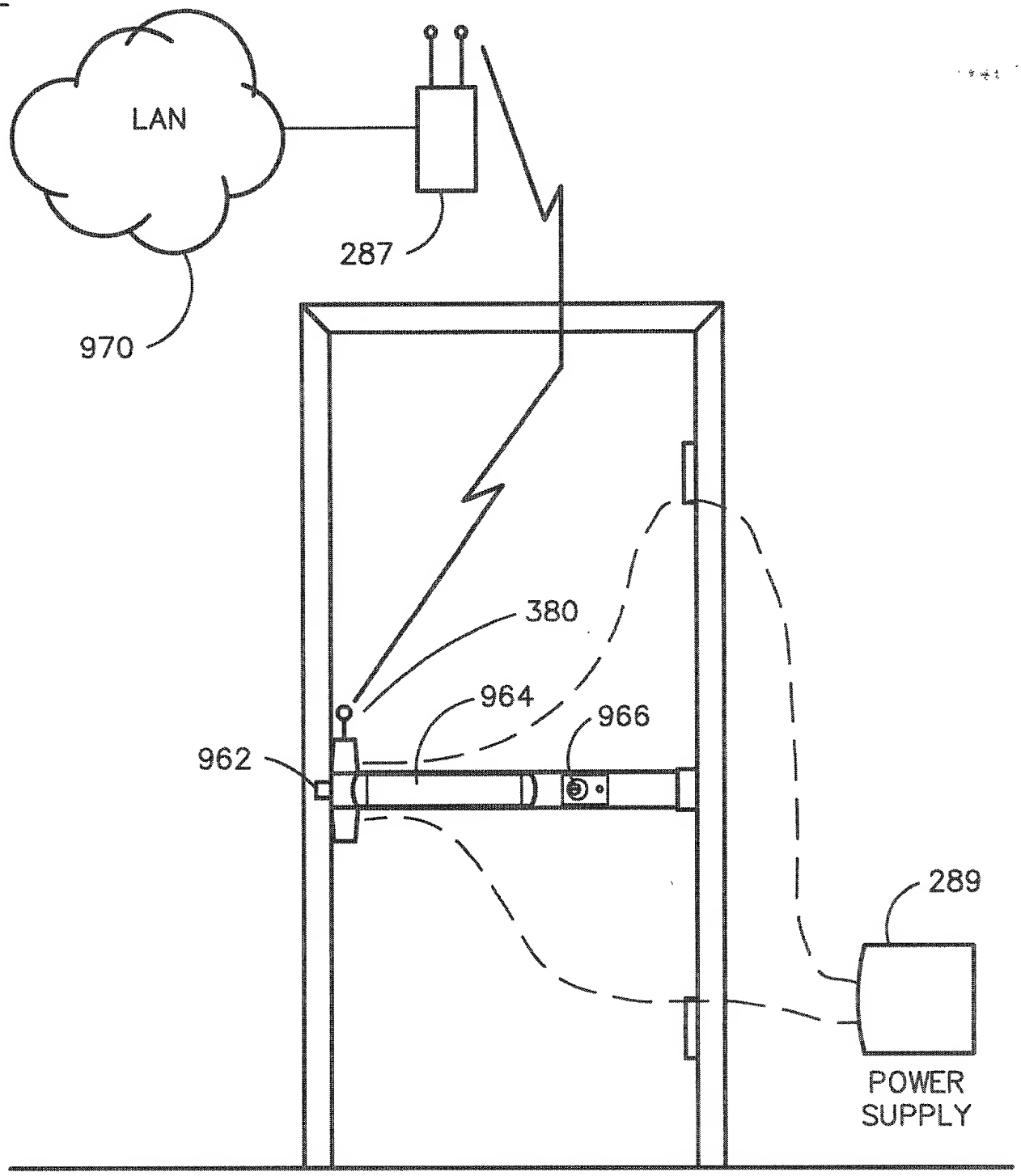
FIG. 42A

WIRELESS PULL HANDLE



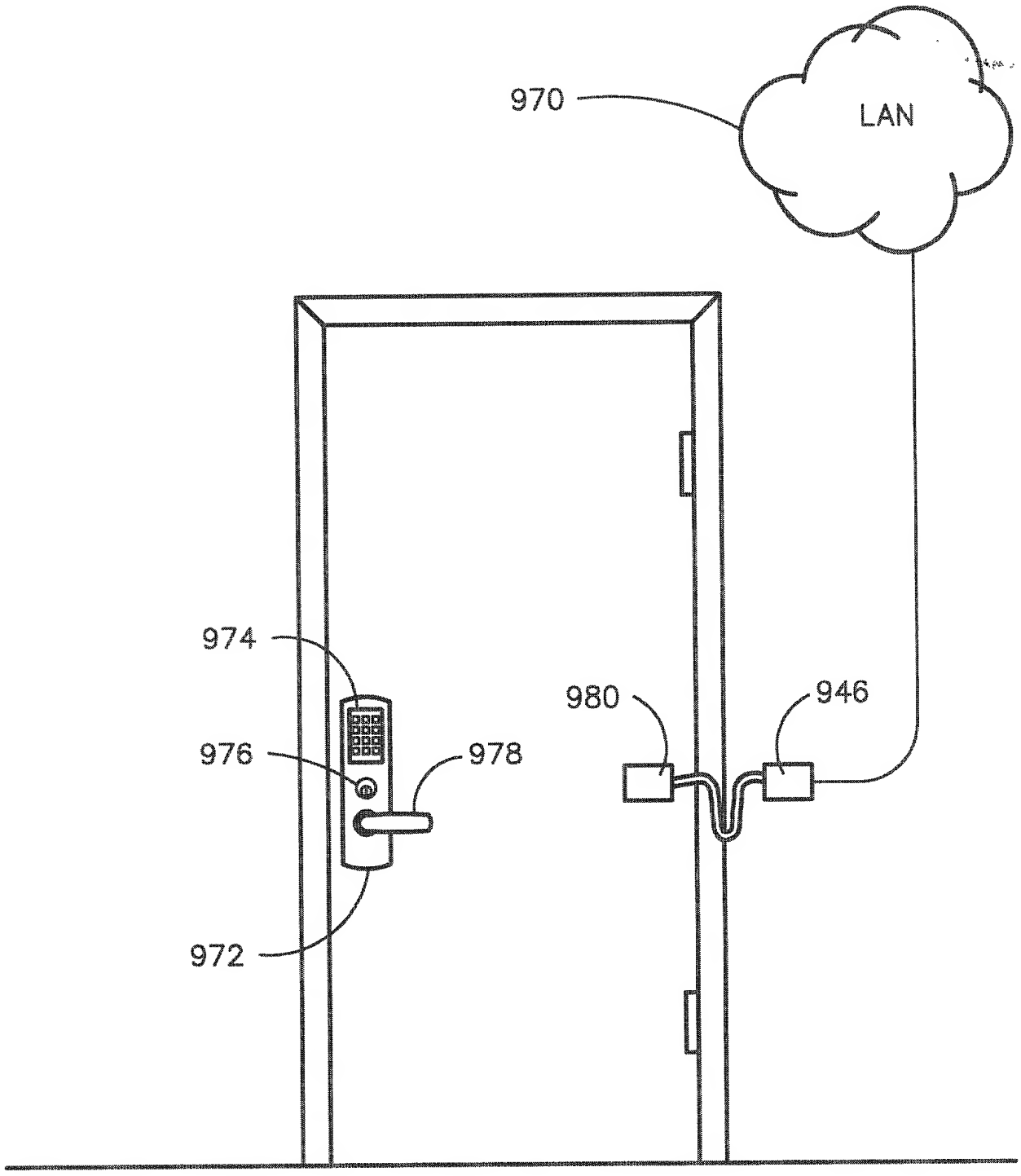
WIRED EXIT DEVICE

FIG. 43



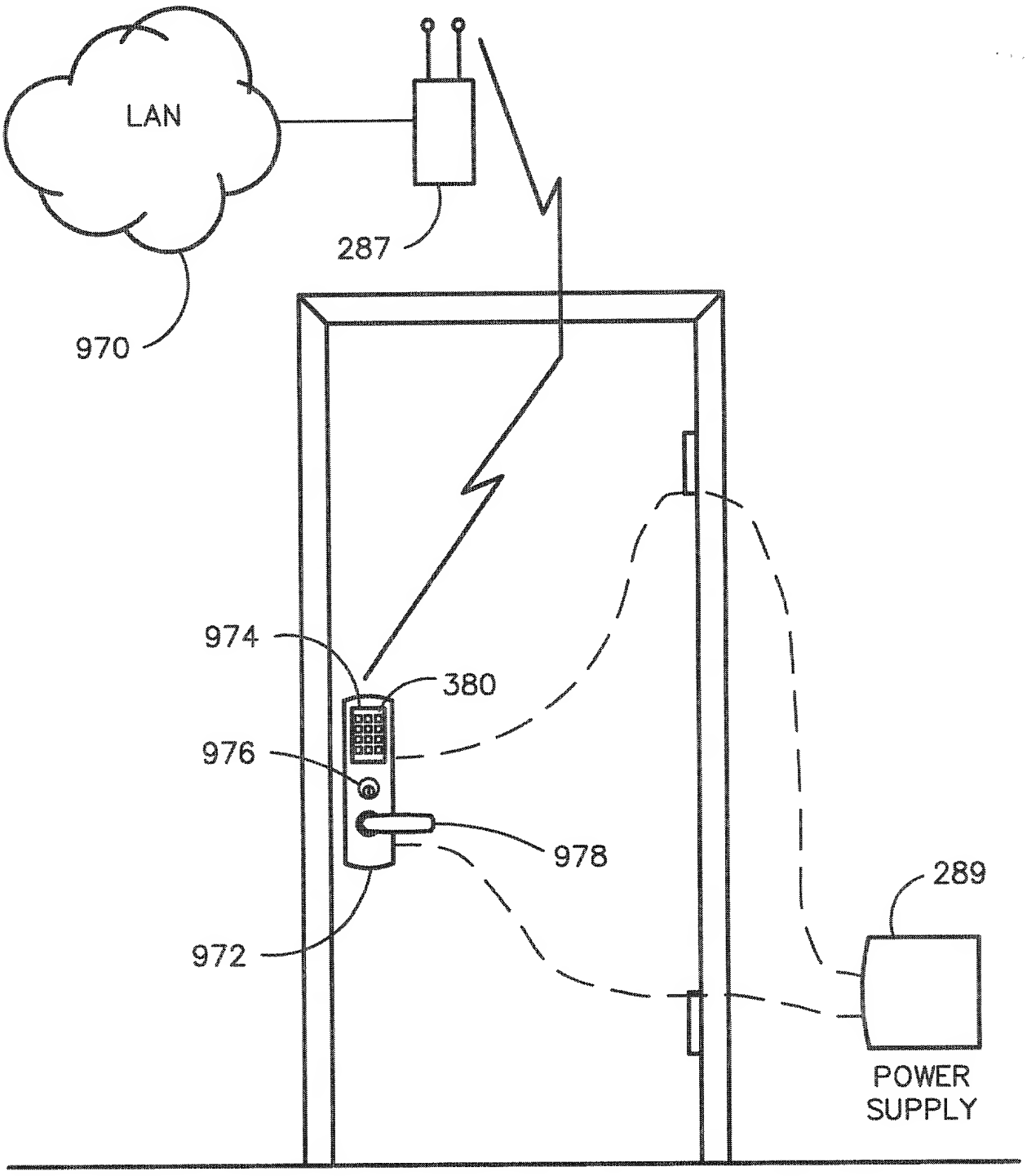
WIRELESS EXIT DEVICE

FIG. 43A



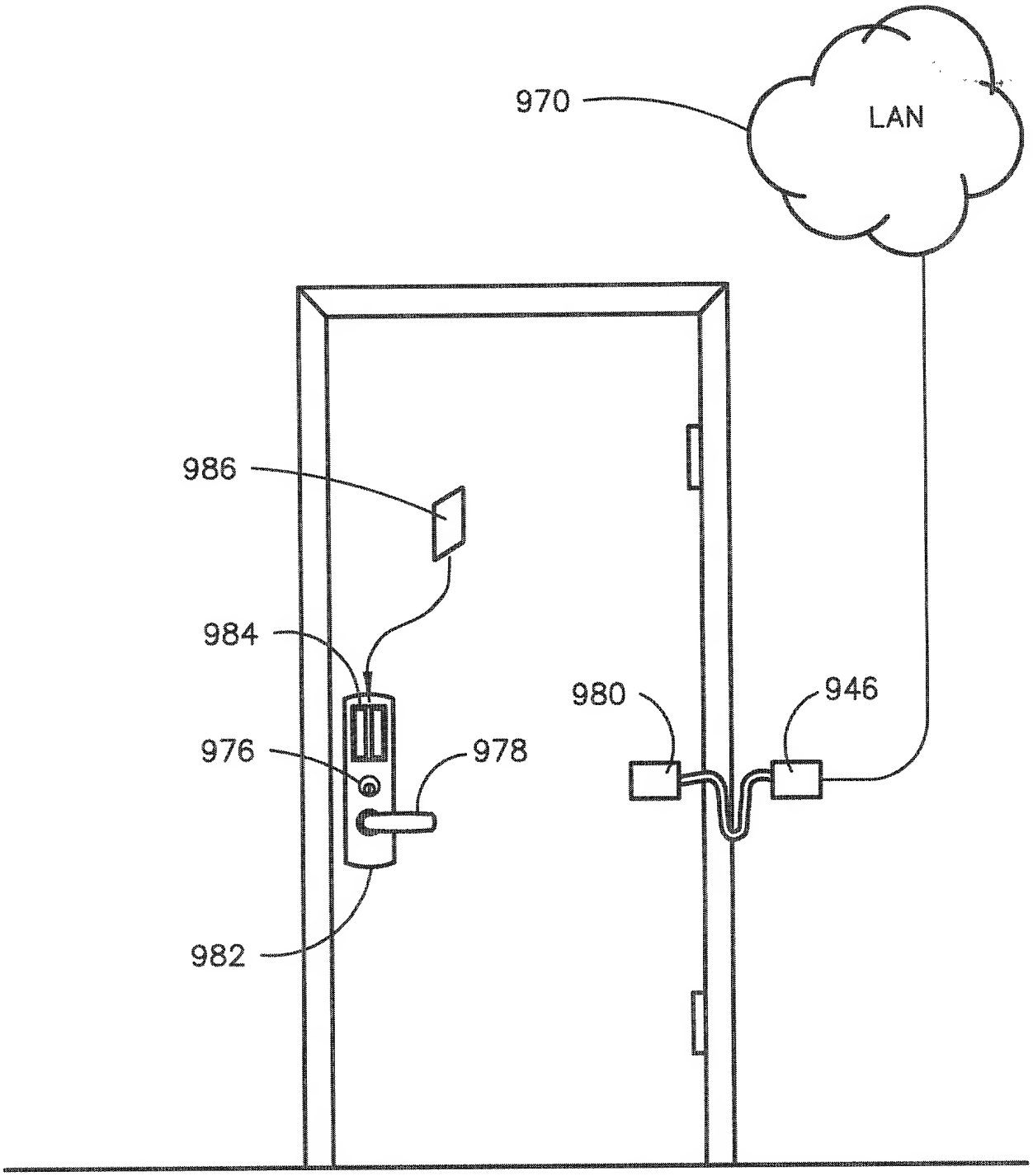
WIRED KEYPAD MORTISE LOCK

FIG. 44



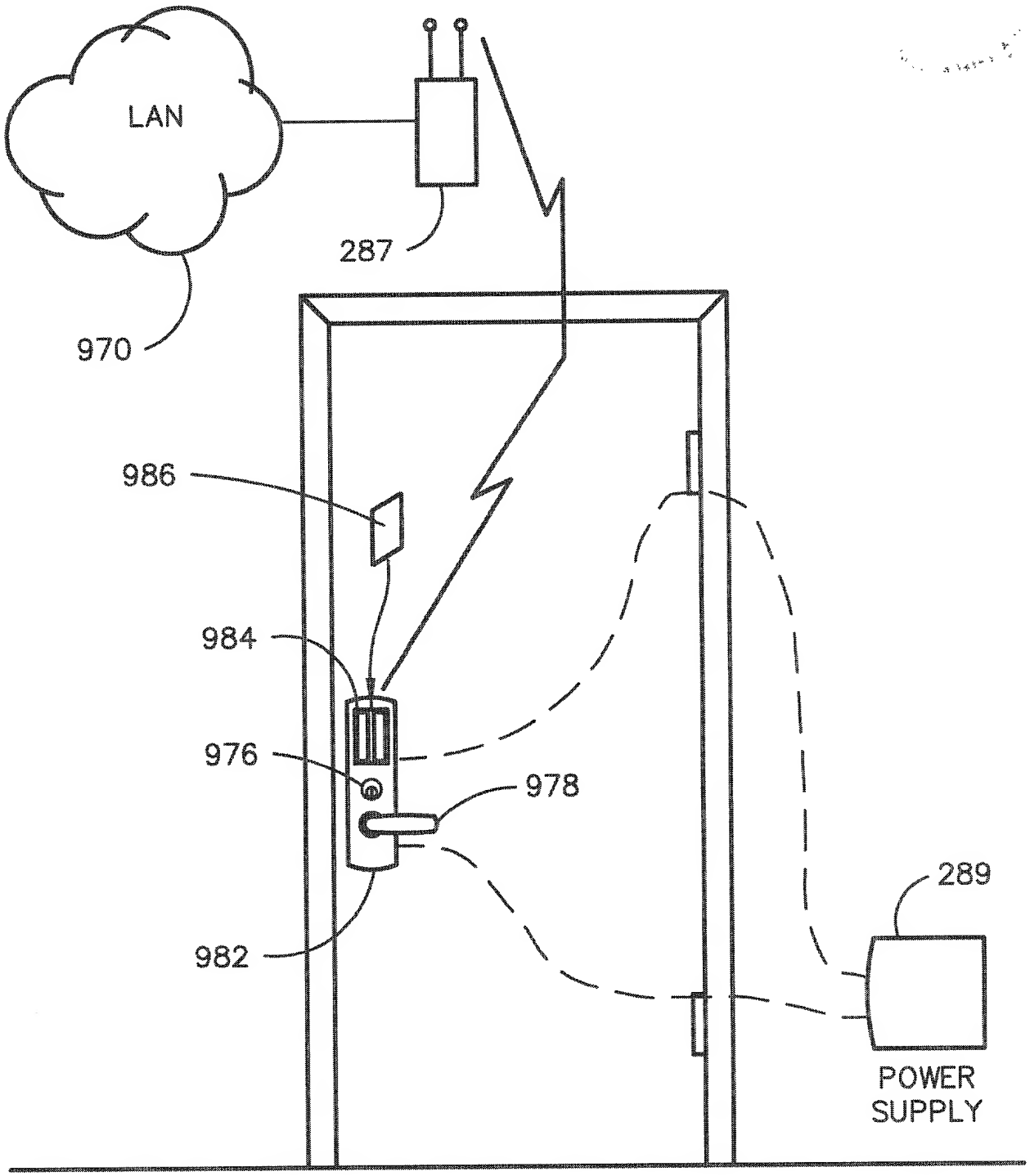
WIRELESS KEYPAD MORTISE LOCK

FIG. 44A



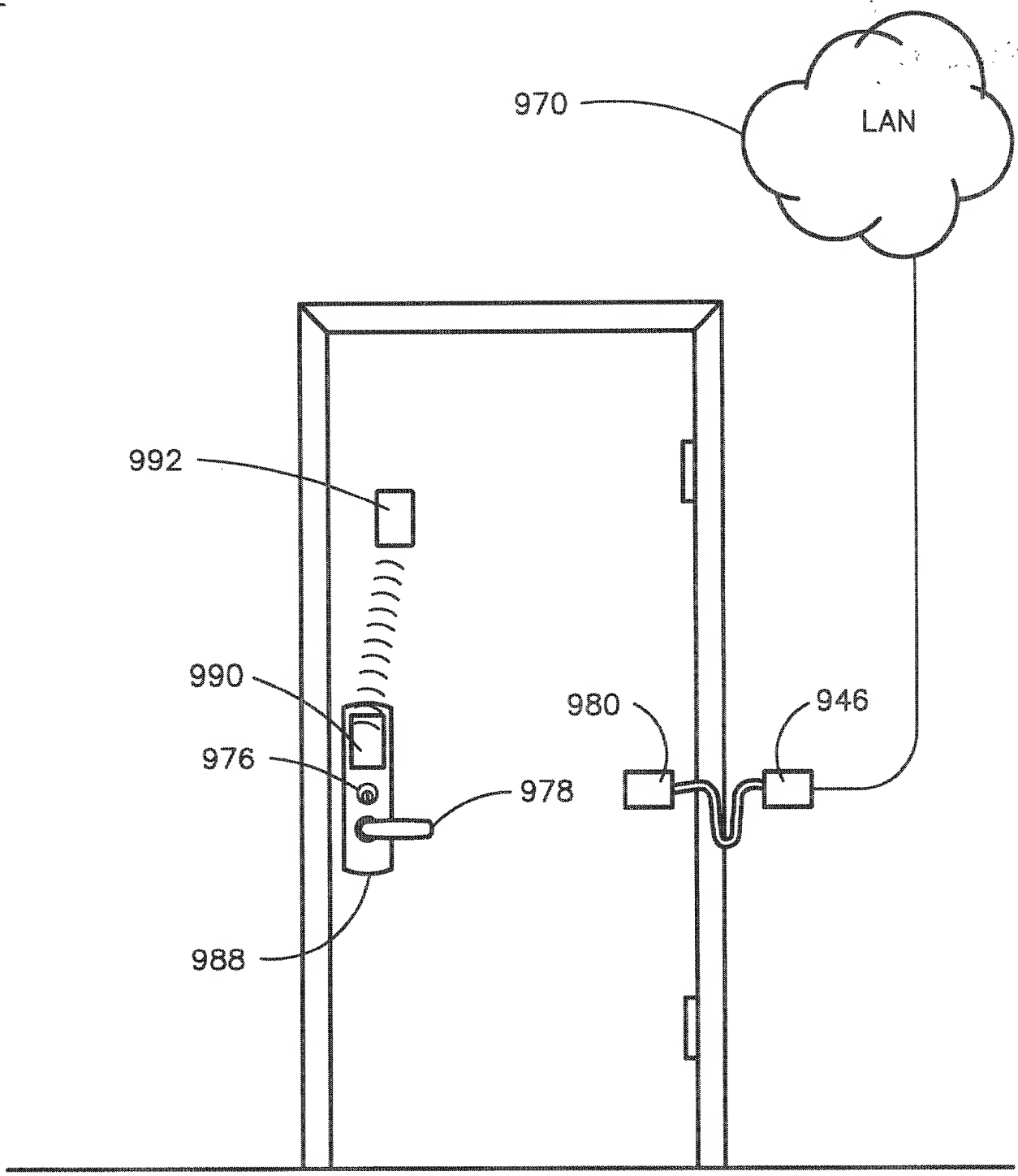
WIRED SWIPE CARD READER MORTISE

FIG. 45



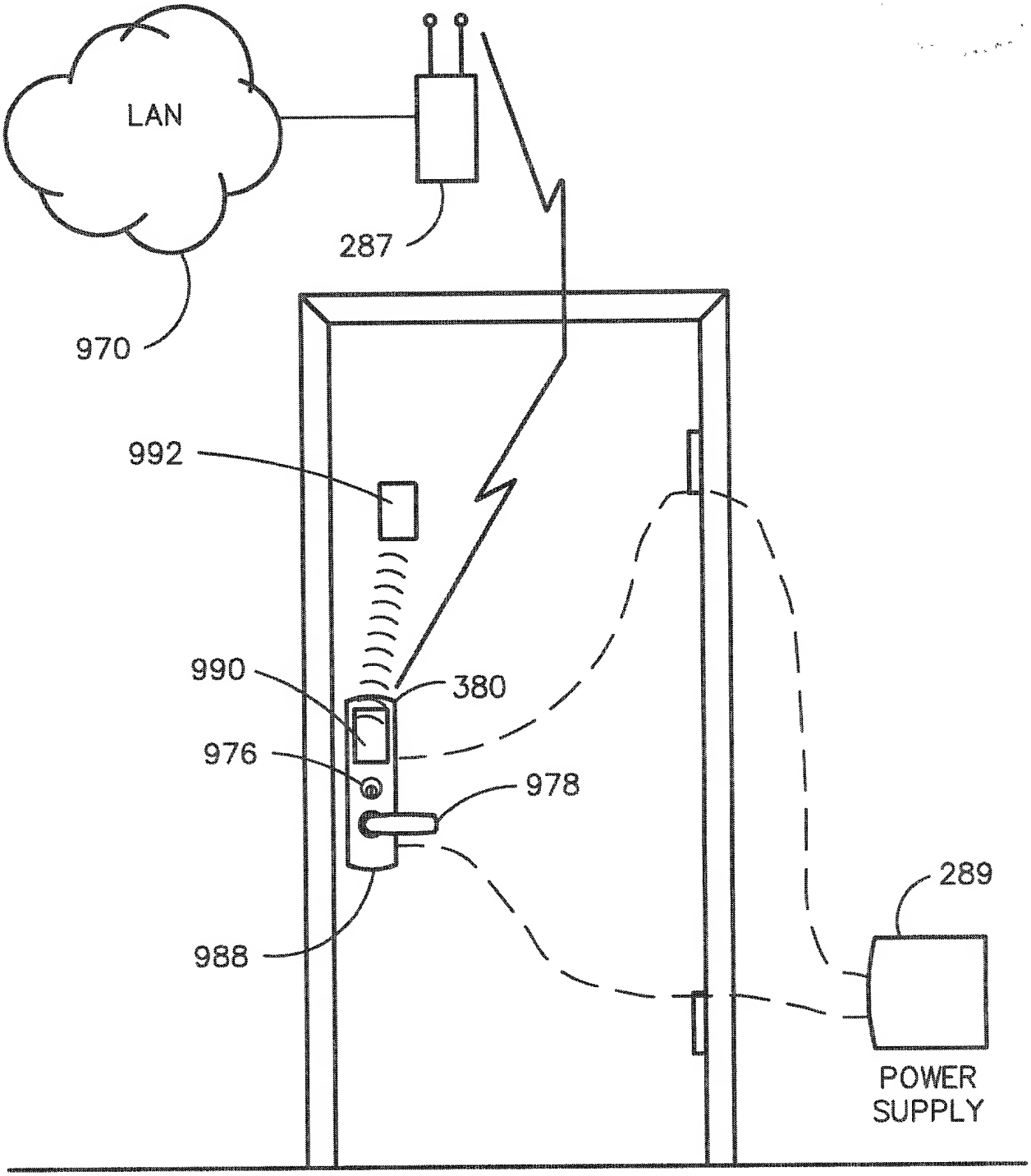
WIRELESS SWIPE CARD MORTISE LOCK

FIG. 45A



WIRED PROXIMITY CARD READER MORTISE LOCK

FIG. 46



WIRELESS PROXIMITY CARD READER MORTISE LOCK

FIG. 46A

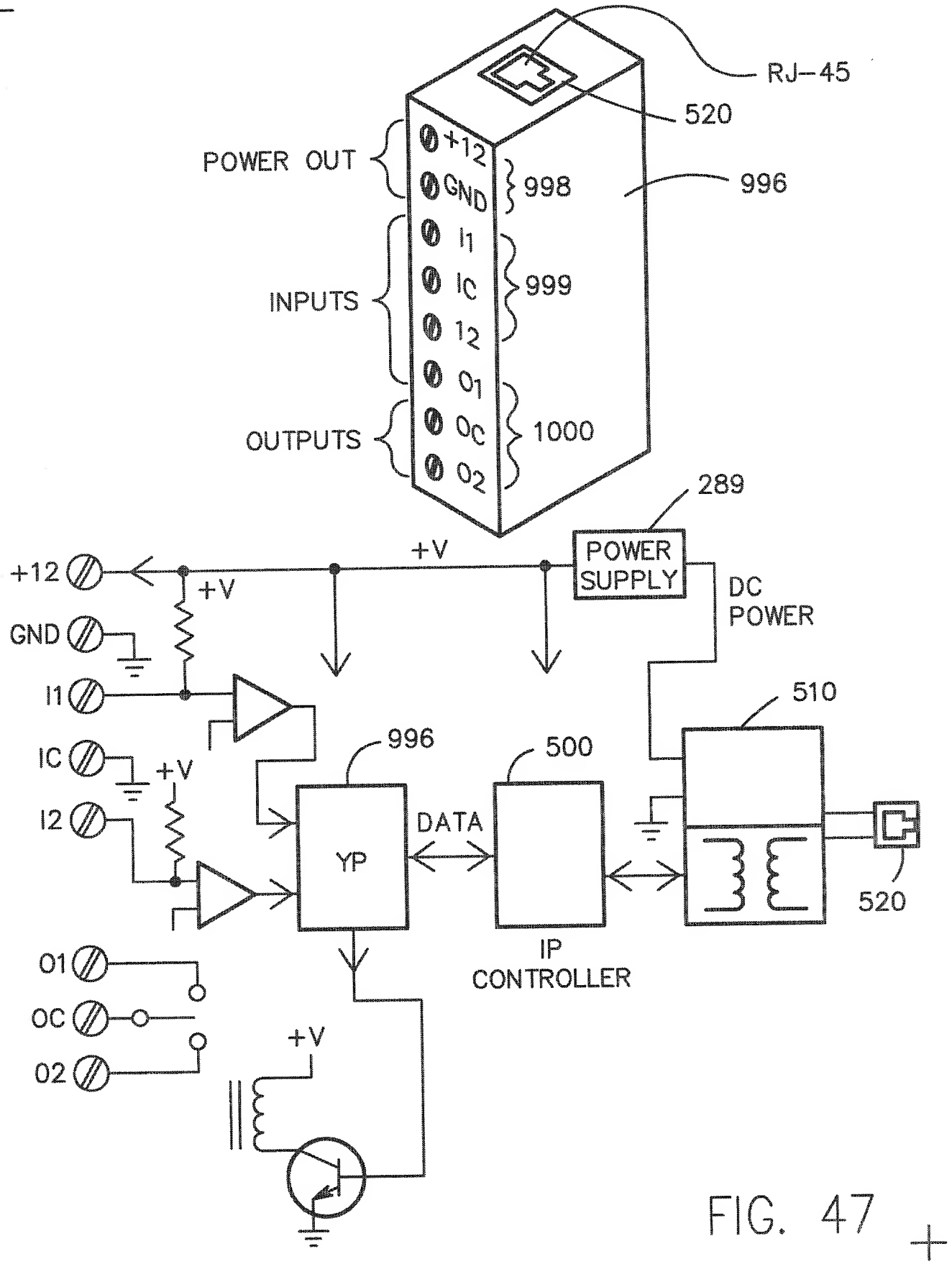

RJ-45
520
POWER OUT
+12
GND
998
996
INPUTS
I1
IC
I2
999
O1
OUTPUTS
OC
O2
1000
289
+V
POWER SUPPLY
DC POWER
+12
+V
GND
I1
510
IC
+V
I2
996
500
YP
DATA
520
IP CONTROLLER
O1
OC
O2
+V

FIG. 47

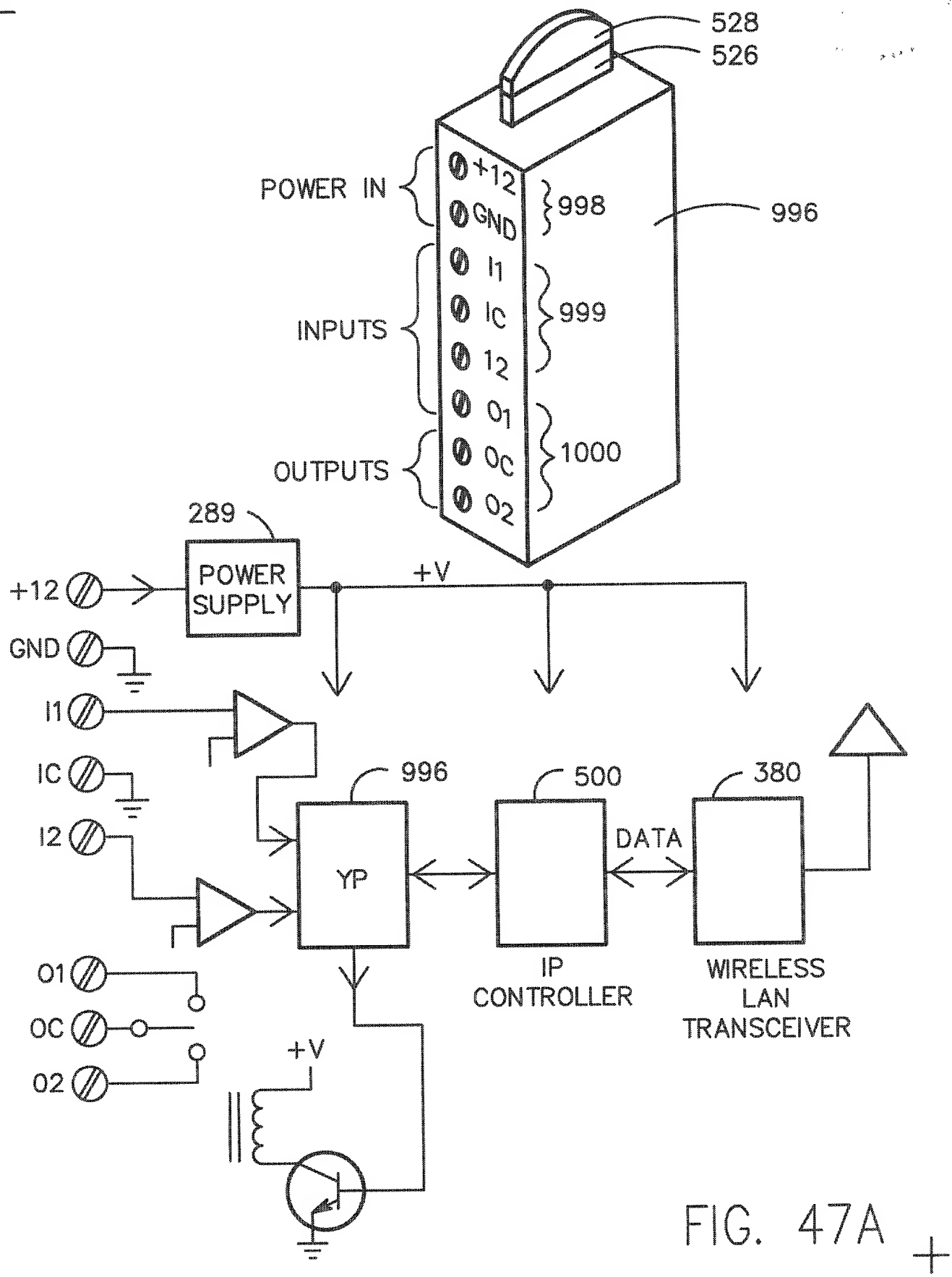
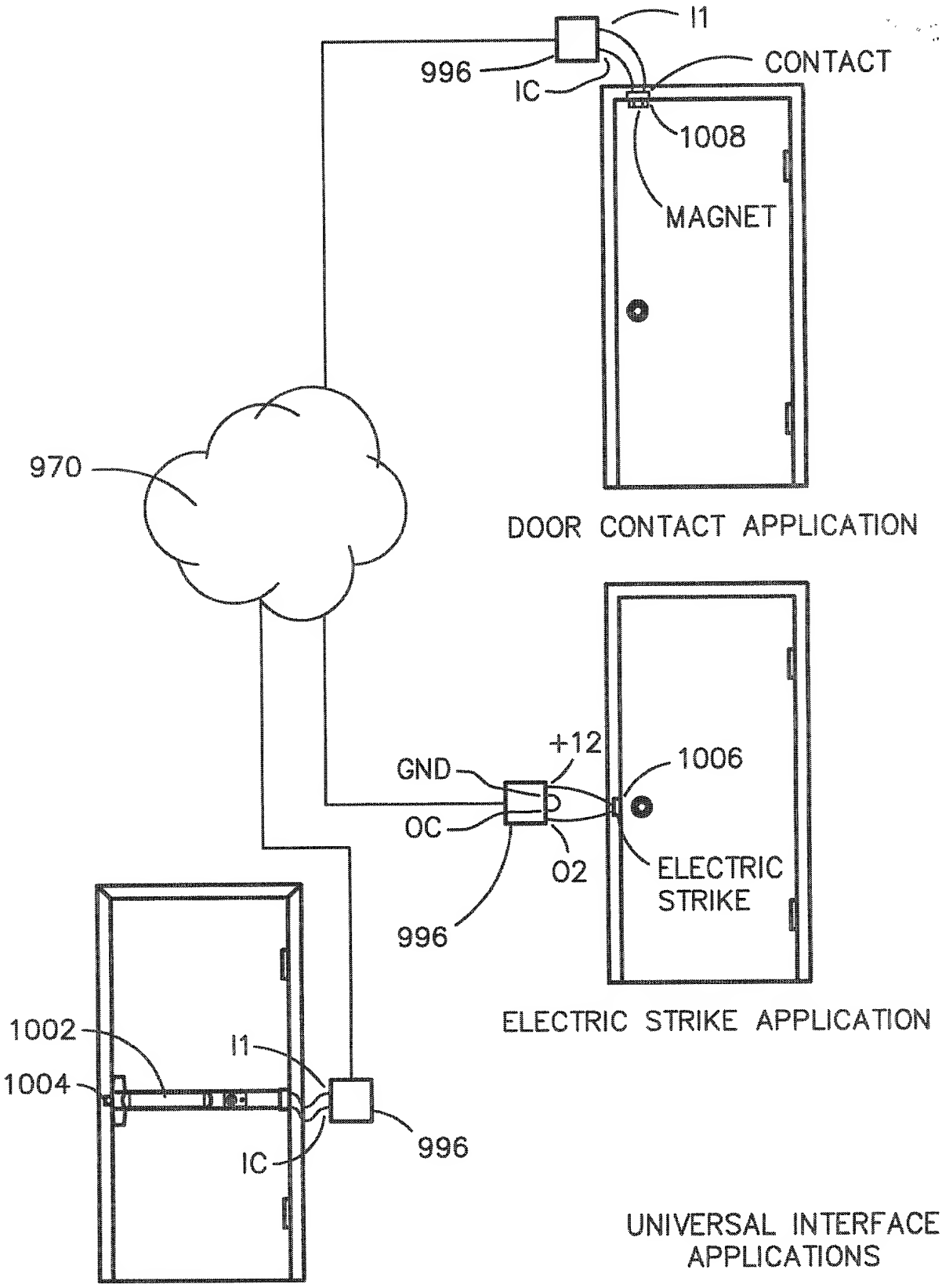

528
526
POWER IN
+12
GND
998
996
INPUTS
I1
IC
I2
999
O1
OUTPUTS
OC
O2
1000
289
POWER SUPPLY
+12
GND
+V
I1
IC
I2
996
500
380
YP
DATA
O1
OC
O2
IP CONTROLLER
WIRELESS LAN TRANSCEIVER
+V

FIG. 47A



UNIVERSAL INTERFACE APPLICATIONS

FIG. 48

D596,156 - 01/06/09

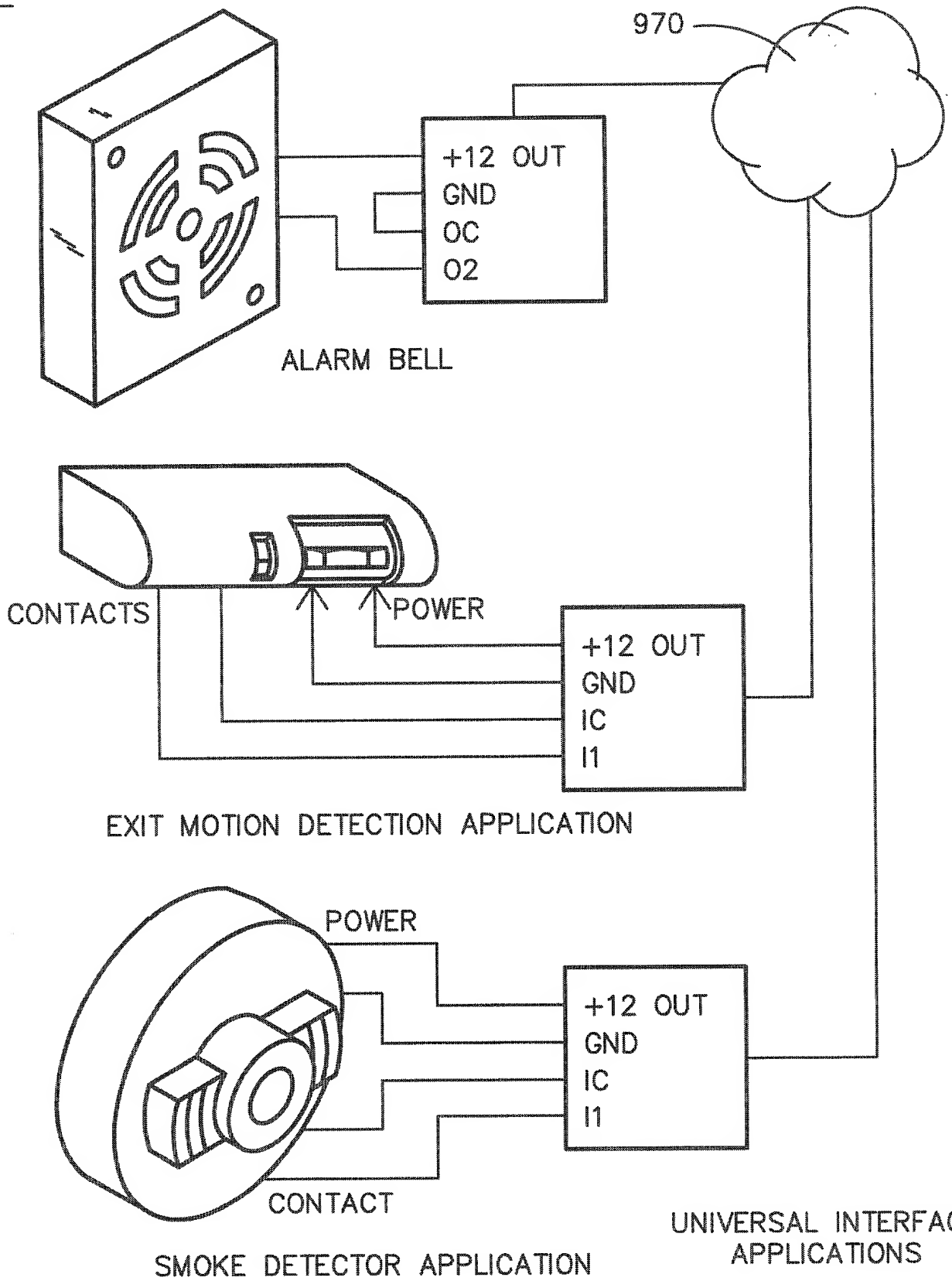
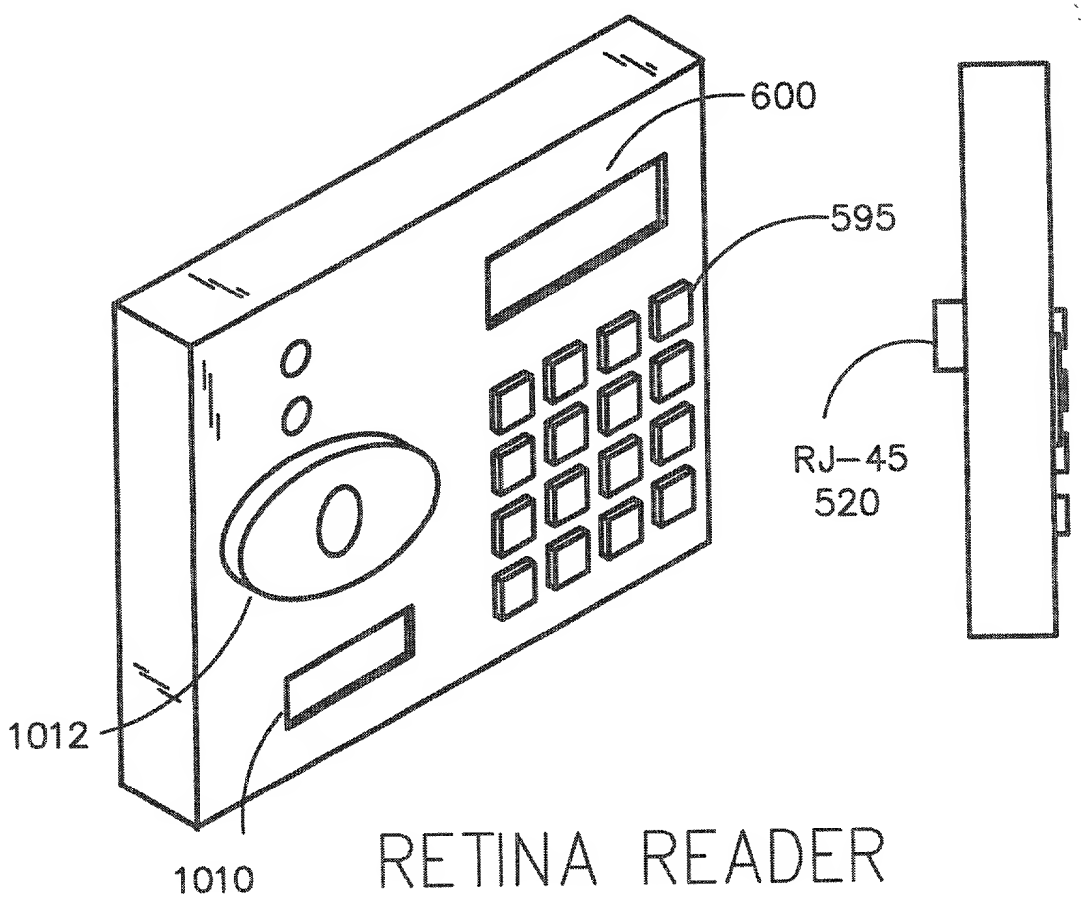


FIG. 49

D596,130 S


600
595
RJ-45
520
1012
1010
RETINA READER

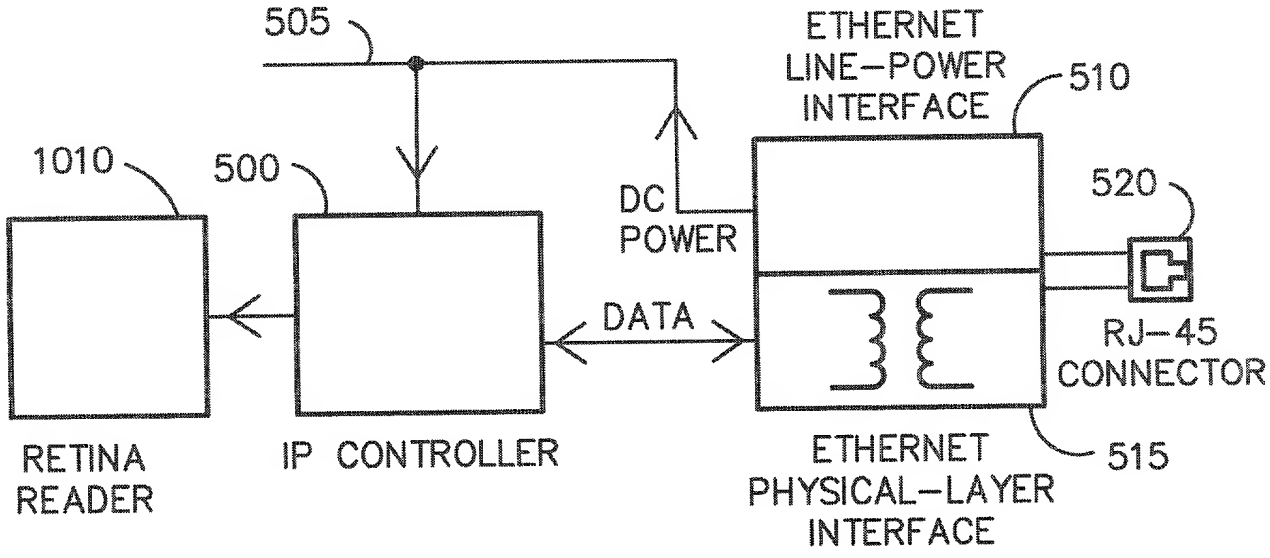
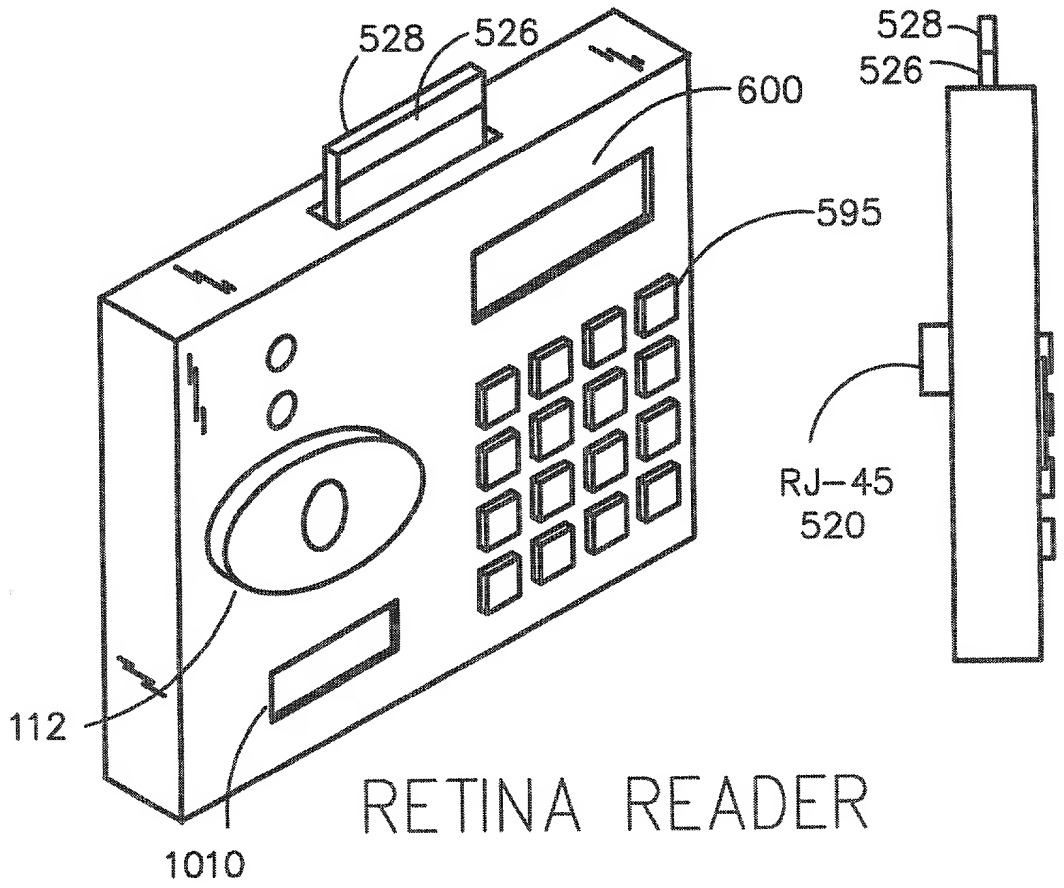

505
ETHERNET
LINE-POWER
INTERFACE
510
1010
500
520
DC
POWER
DATA
RJ-45
CONNECTOR
RETINA
READER
IP CONTROLLER
ETHERNET
PHYSICAL-LAYER
INTERFACE
515

FIG. 49A


528
526
600
595
528
526
RJ-45
520
112
1010
RETINA READER

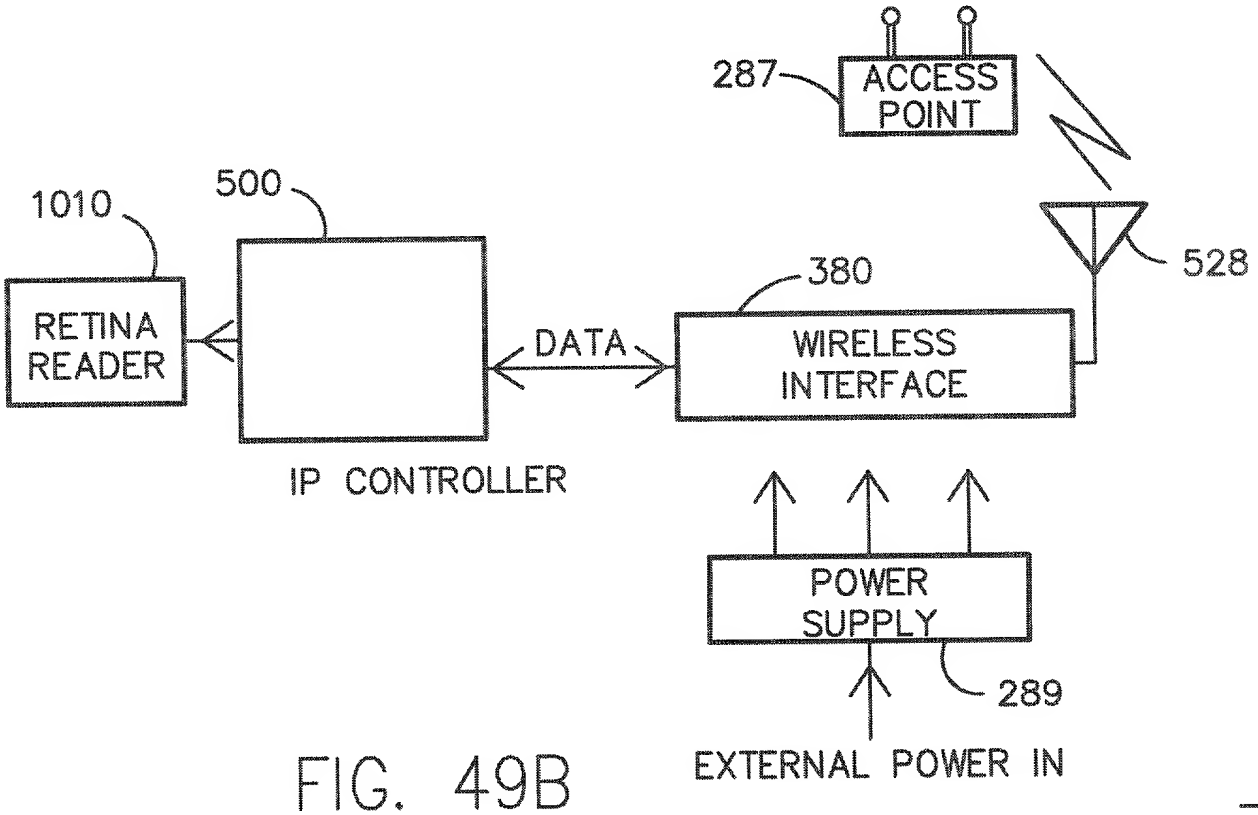
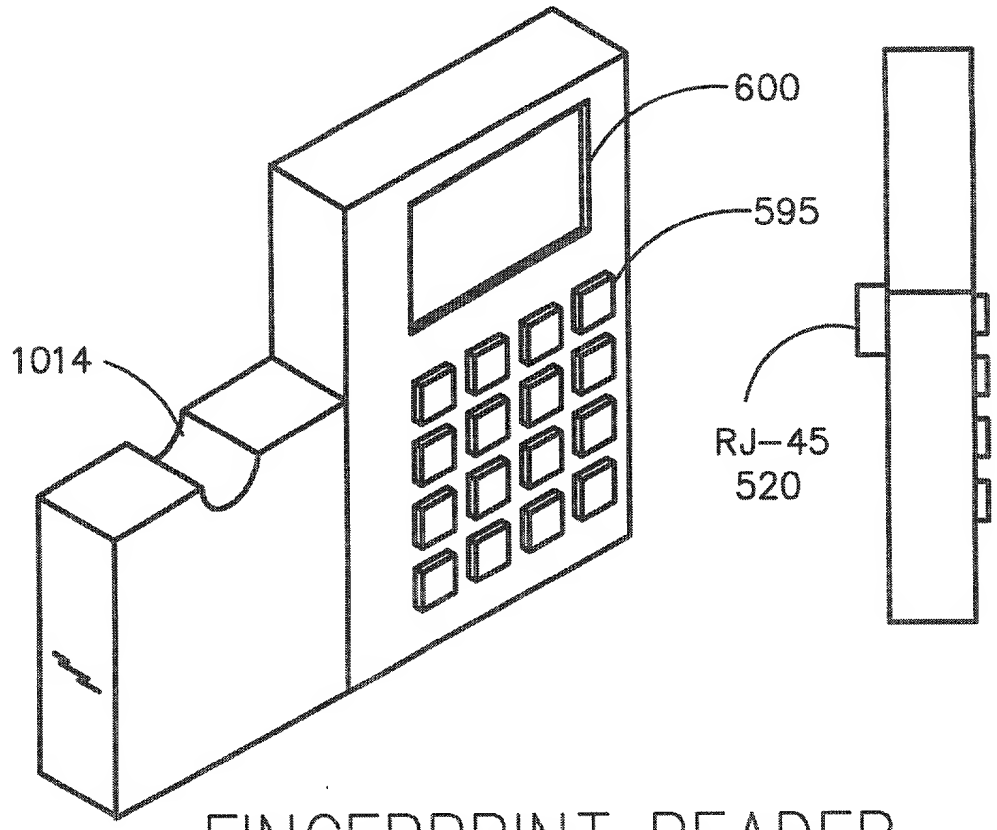

287
ACCESS POINT
1010
500
528
380
RETINA READER
DATA
WIRELESS INTERFACE
IP CONTROLLER
POWER SUPPLY
289
EXTERNAL POWER IN

FIG. 49B



FINGERPRINT READER

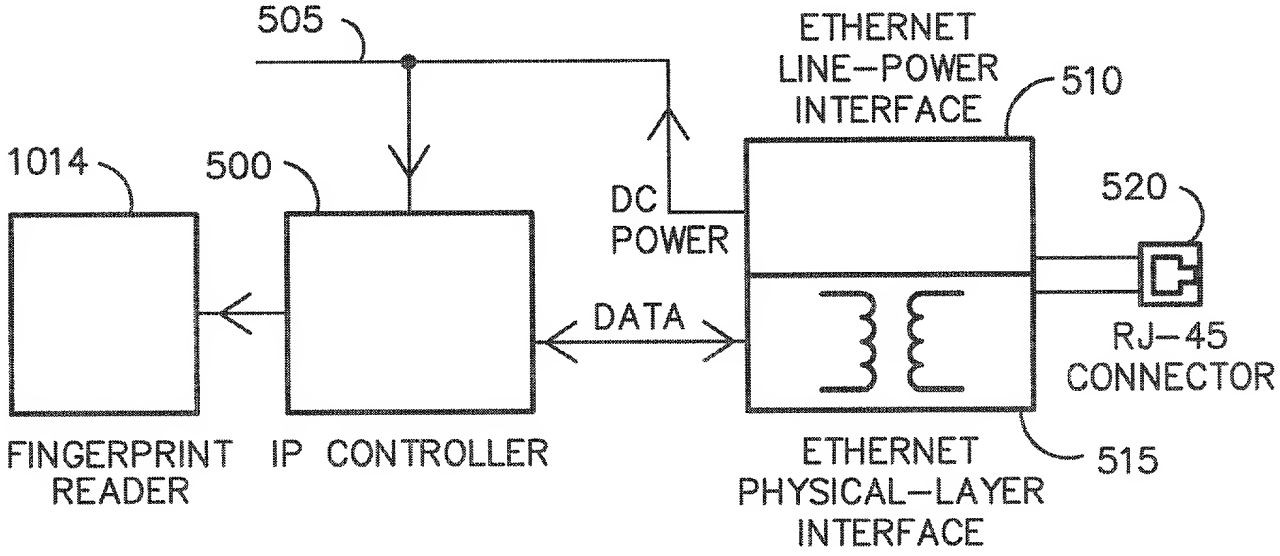
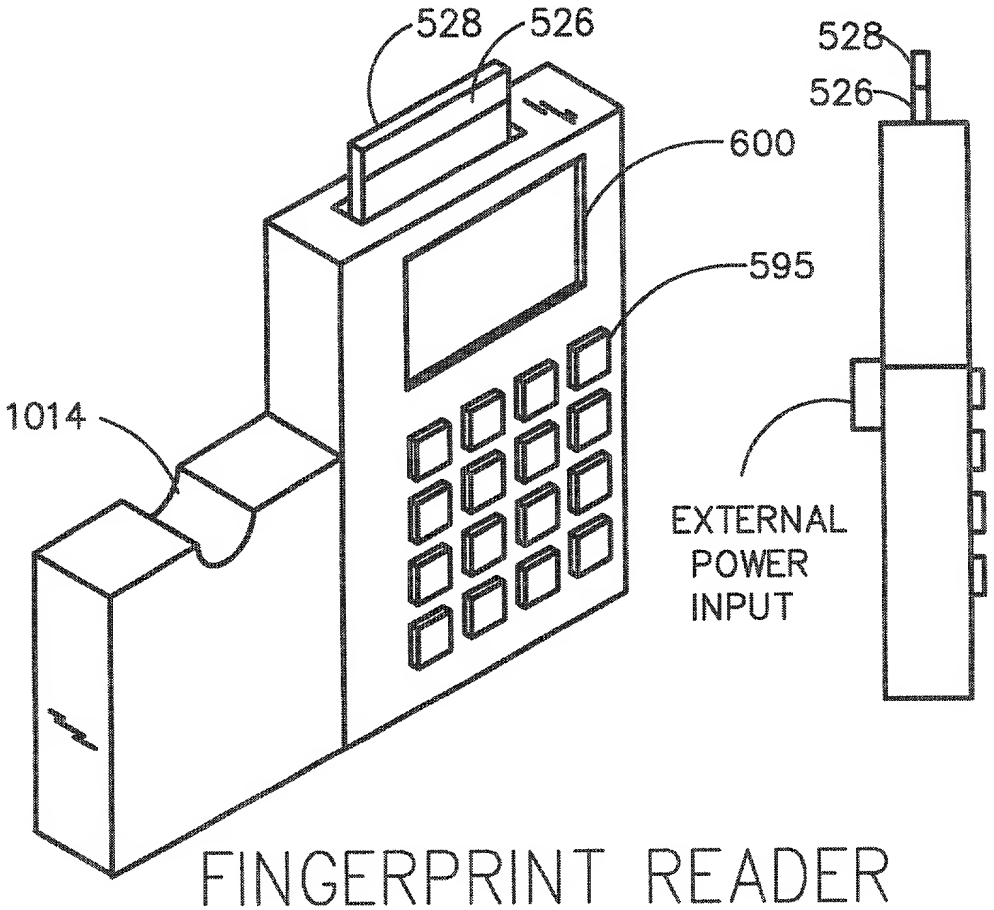


FIG. 49C



FINGERPRINT READER

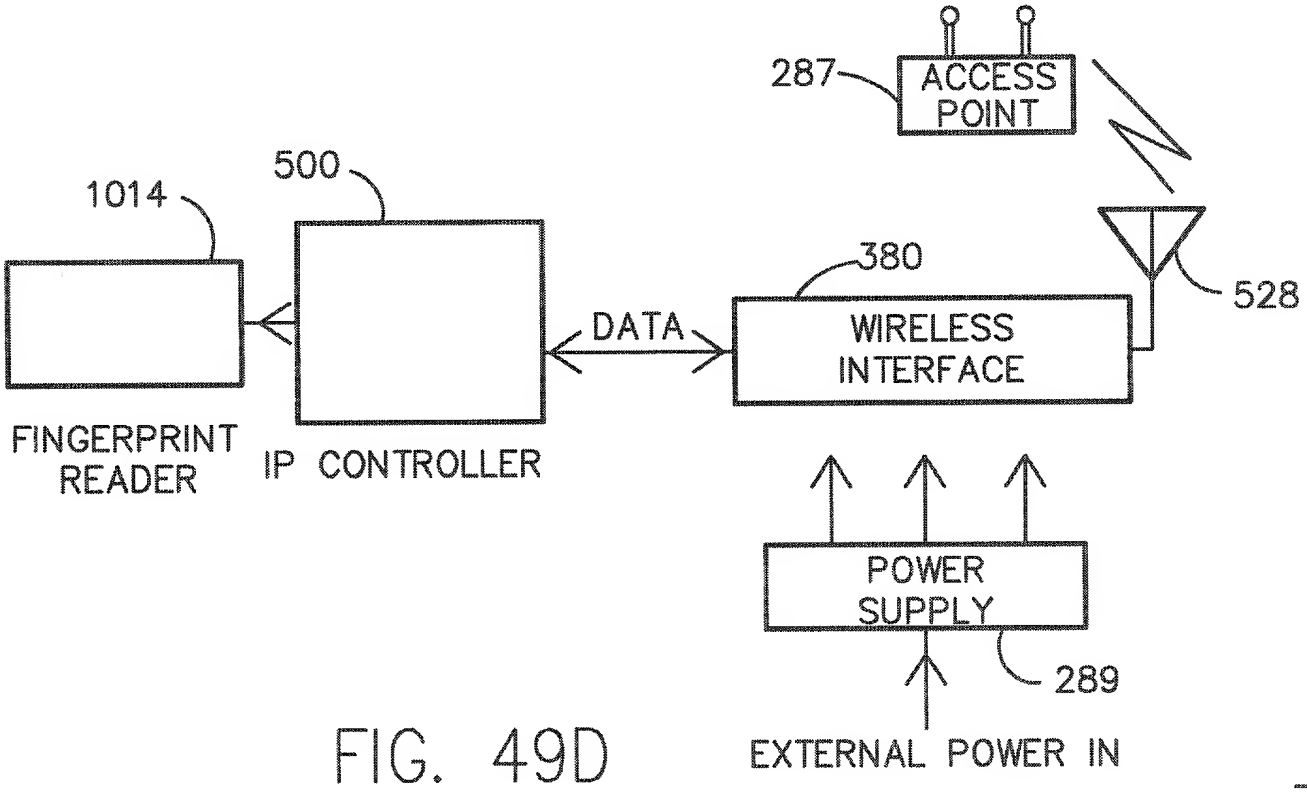


FIG. 49D

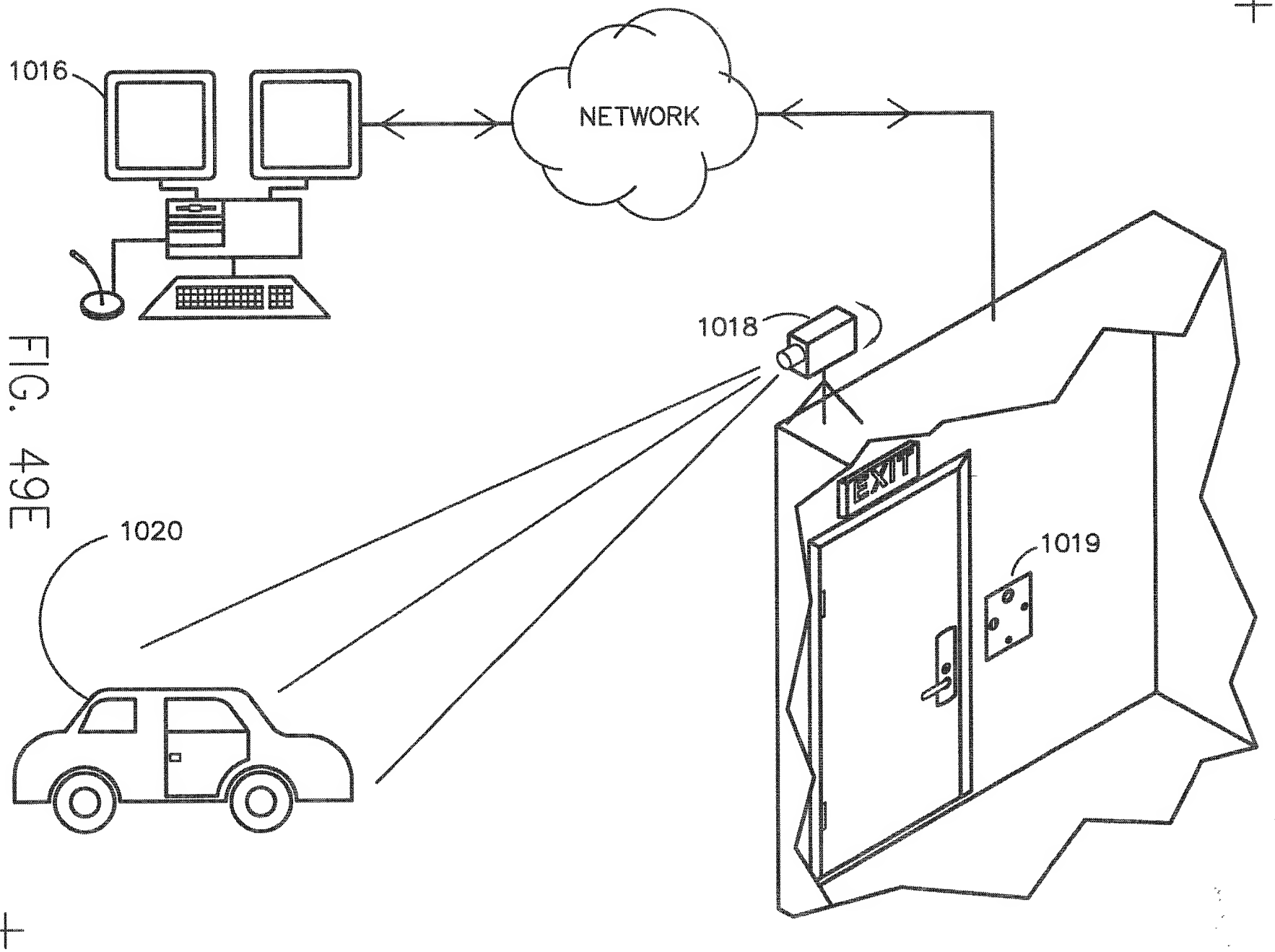


FIG. 49E

20801D "DET9660

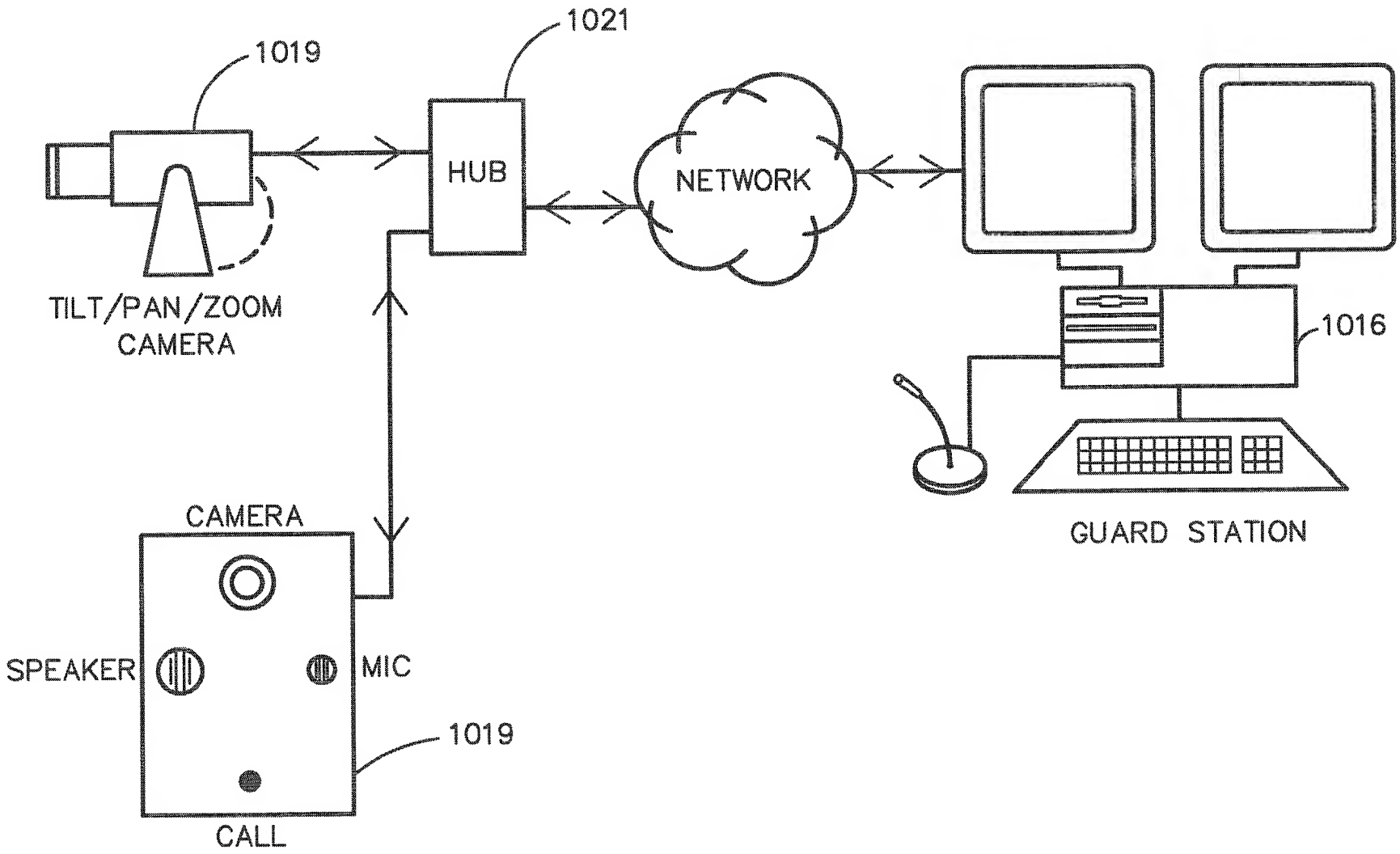


FIG. 49F

SECURITY APPLIANCE BLOCK DIAGRAM

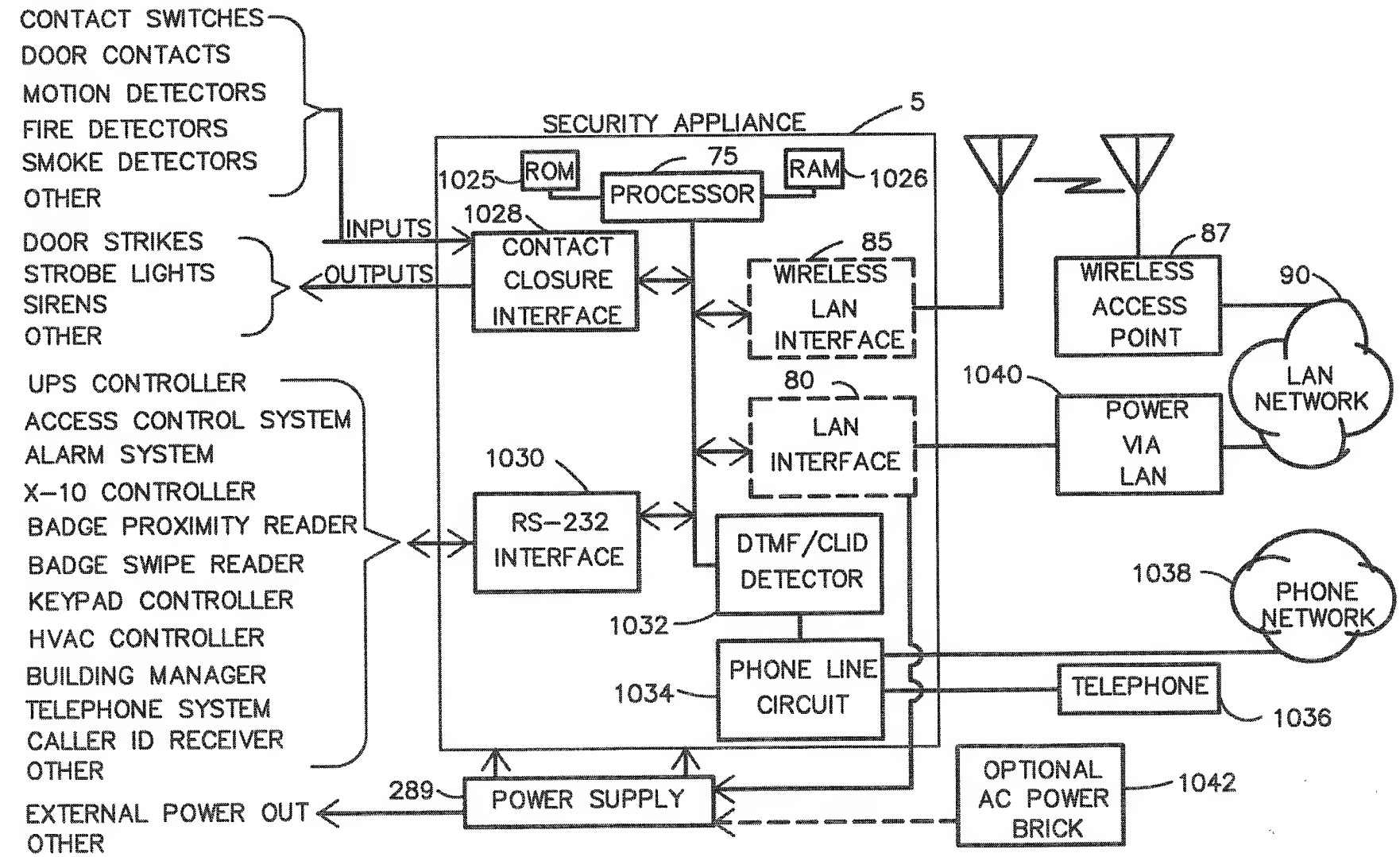


FIG. 50

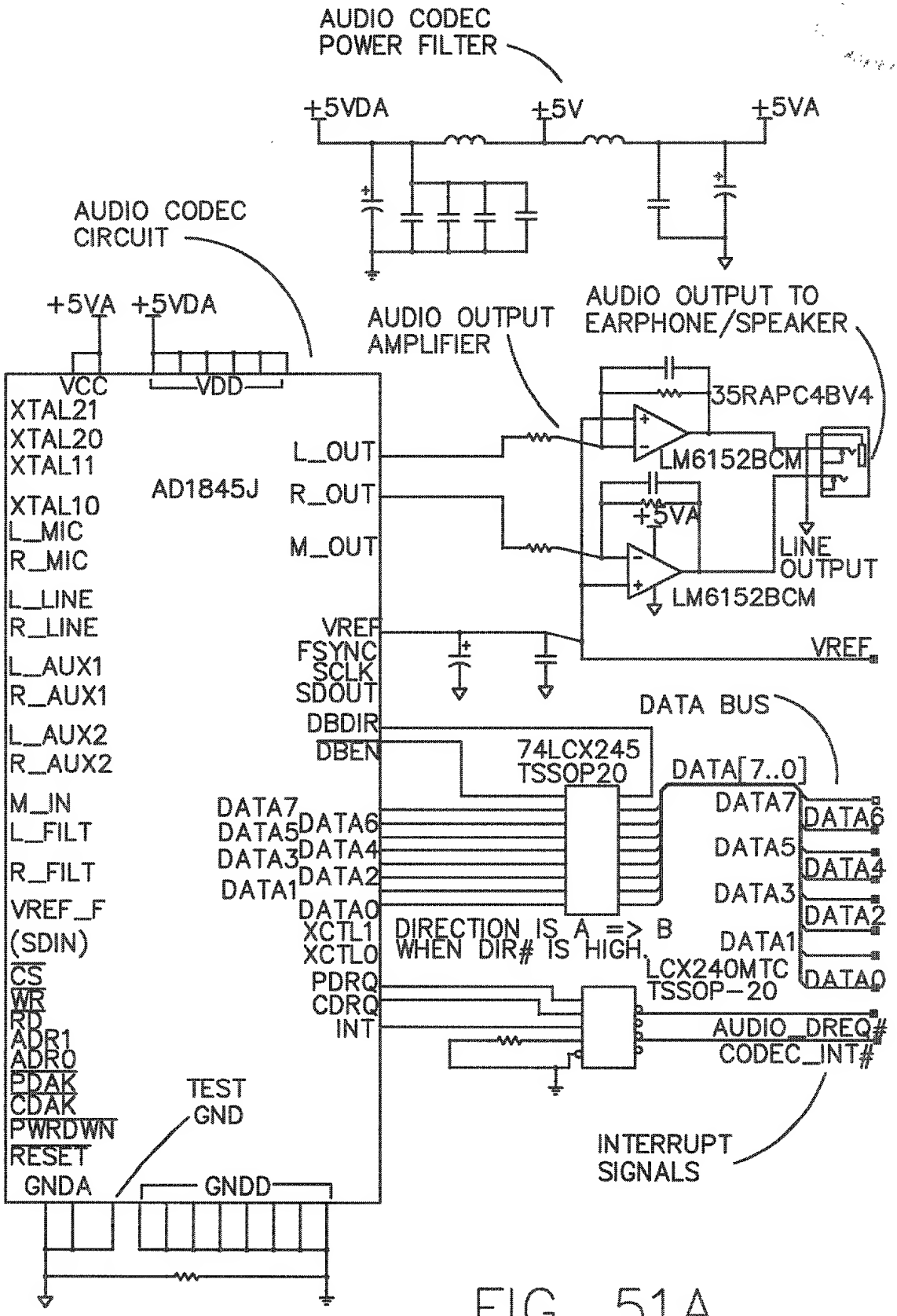

AUDIO CODEC
POWER FILTER
+5VDA
+5V
+5VA
AUDIO CODEC
CIRCUIT
+5VA +5VDA
VCC
VDD
XTAL21
XTAL20
XTAL11
XTAL10
L_MIC
R_MIC
L_LINE
R_LINE
L_AUX1
R_AUX1
L_AUX2
R_AUX2
M_IN
L_FILT
R_FILT
VREF_F
(SDIN)
CS
WR
RD
ADR1
ADR0
PDAK
CDAK
PWRDWN
RESET
GNDA
AD1845J
L_OUT
R_OUT
M_OUT
VREF
FSYNC
SCLK
SDOUT
DBDIR
DBEN
DATA7
DATA6
DATA5
DATA4
DATA3
DATA2
DATA1
DATA0
XCTL1
XCTL0
PDRQ
CDRQ
INT
TEST
GND
GNDD
AUDIO OUTPUT
AMPLIFIER
AUDIO OUTPUT TO
EARPHONE/SPEAKER
35RAPC4BV4
LM6152BCM
+5VA
LINE
OUTPUT
LM6152BCM
VREF
DATA BUS
74LCX245
TSSOP20
DATA[7..0]
DIRECTION IS A => B
WHEN DIR# IS HIGH.
LCX240MTC
TSSOP-20
AUDIO_DREQ#
CODEC_INT#
INTERRUPT
SIGNALS

FIG. 51A

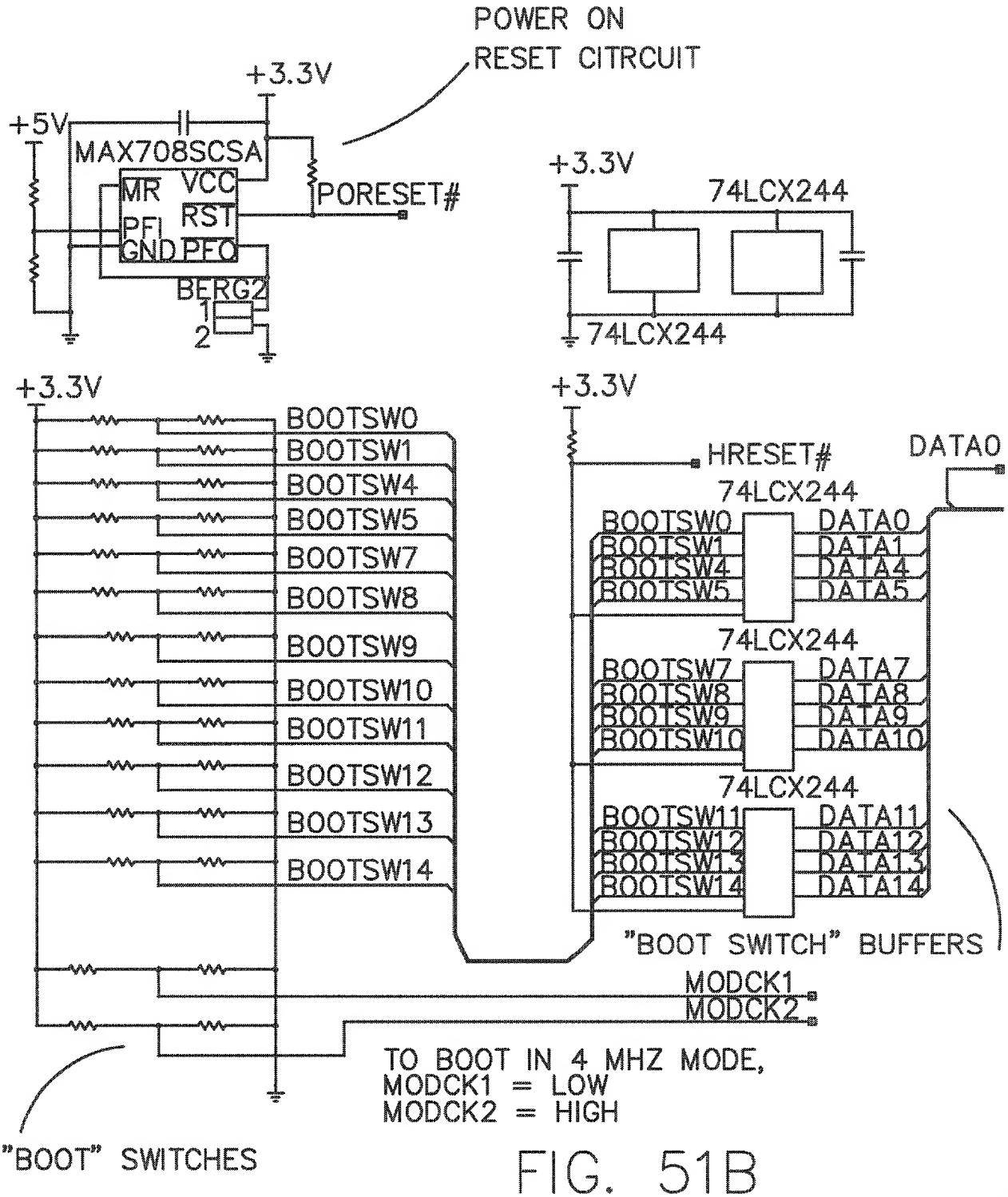

POWER ON
RESET CITRCUIT
+3.3V
+5V
MAX708SCSA
MR
VCC
RST
PFI
GND
PFO
PORESET#
BERG2
1
2
+3.3V
74LCX244
74LCX244
+3.3V
BOOTSW0
BOOTSW1
BOOTSW4
BOOTSW5
BOOTSW7
BOOTSW8
BOOTSW9
BOOTSW10
BOOTSW11
BOOTSW12
BOOTSW13
BOOTSW14
+3.3V
HRESET#
DATA0
74LCX244
BOOTSW0
BOOTSW1
BOOTSW4
BOOTSW5
DATA0
DATA1
DATA4
DATA5
74LCX244
BOOTSW7
BOOTSW8
BOOTSW9
BOOTSW10
DATA7
DATA8
DATA9
DATA10
74LCX244
BOOTSW11
BOOTSW12
BOOTSW13
BOOTSW14
DATA11
DATA12
DATA13
DATA14
"BOOT SWITCH" BUFFERS
MODCK1
MODCK2
TO BOOT IN 4 MHZ MODE,
MODCK1 = LOW
MODCK2 = HIGH
"BOOT" SWITCHES

FIG. 51B

20801D "0EF99660

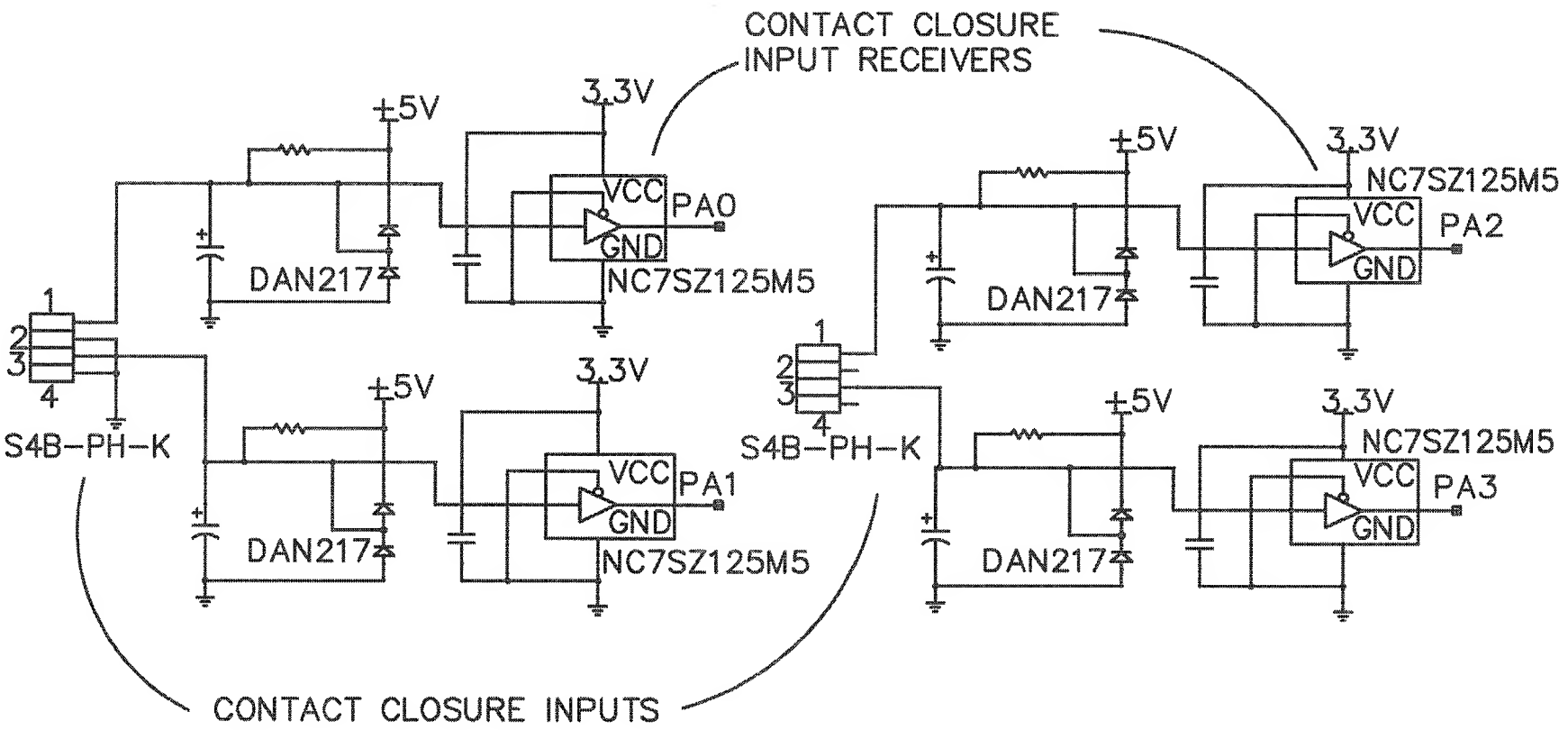


FIG. 51C

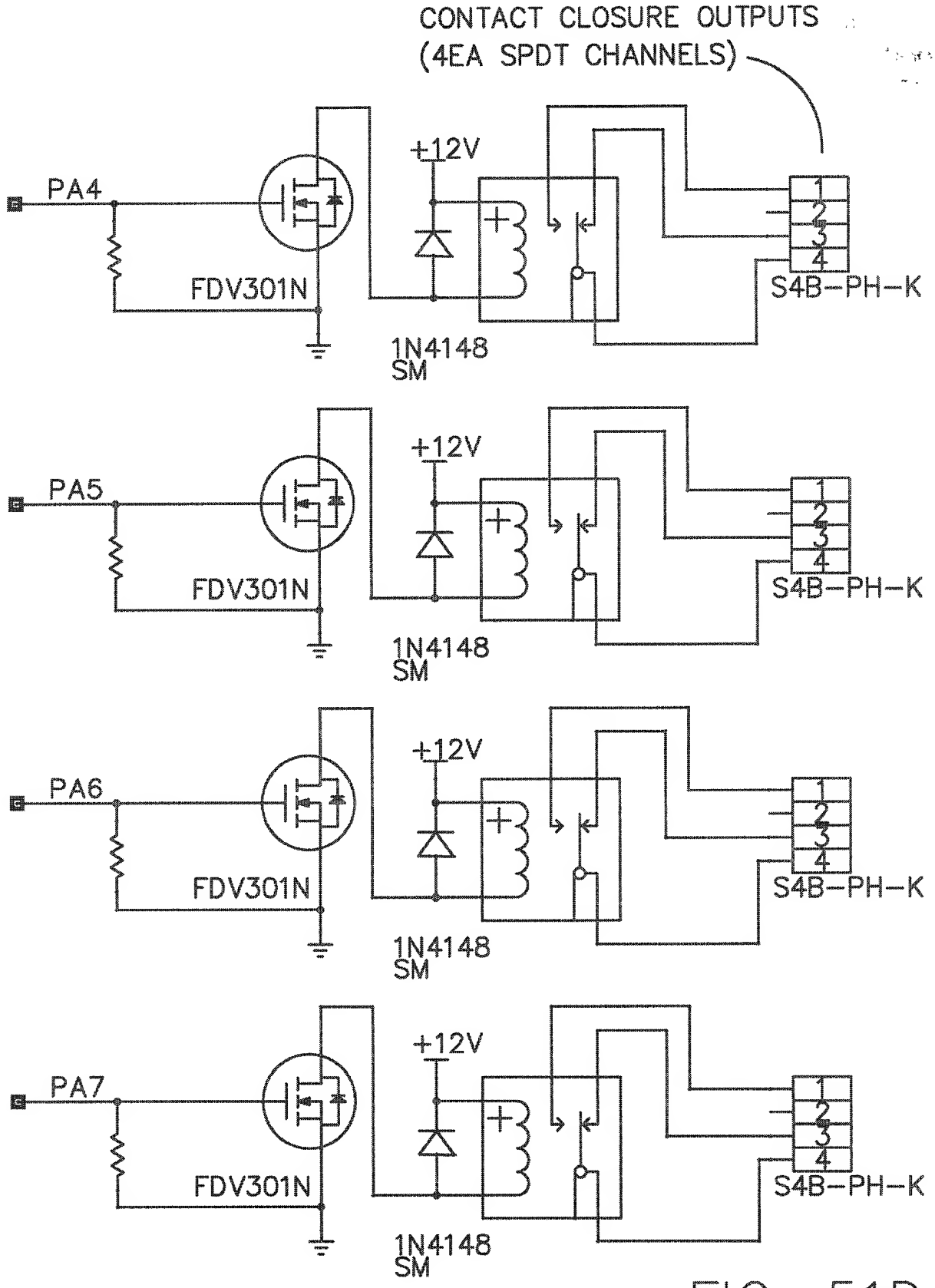

CONTACT CLOSURE OUTPUTS
(4EA SPDT CHANNELS)
PA4
+12V
FDV301N
1N4148
SM
S4B-PH-K
PA5
+12V
FDV301N
1N4148
SM
S4B-PH-K
PA6
+12V
FDV301N
1N4148
SM
S4B-PH-K
PA7
+12V
FDV301N
1N4148
SM
S4B-PH-K

FIG. 51D

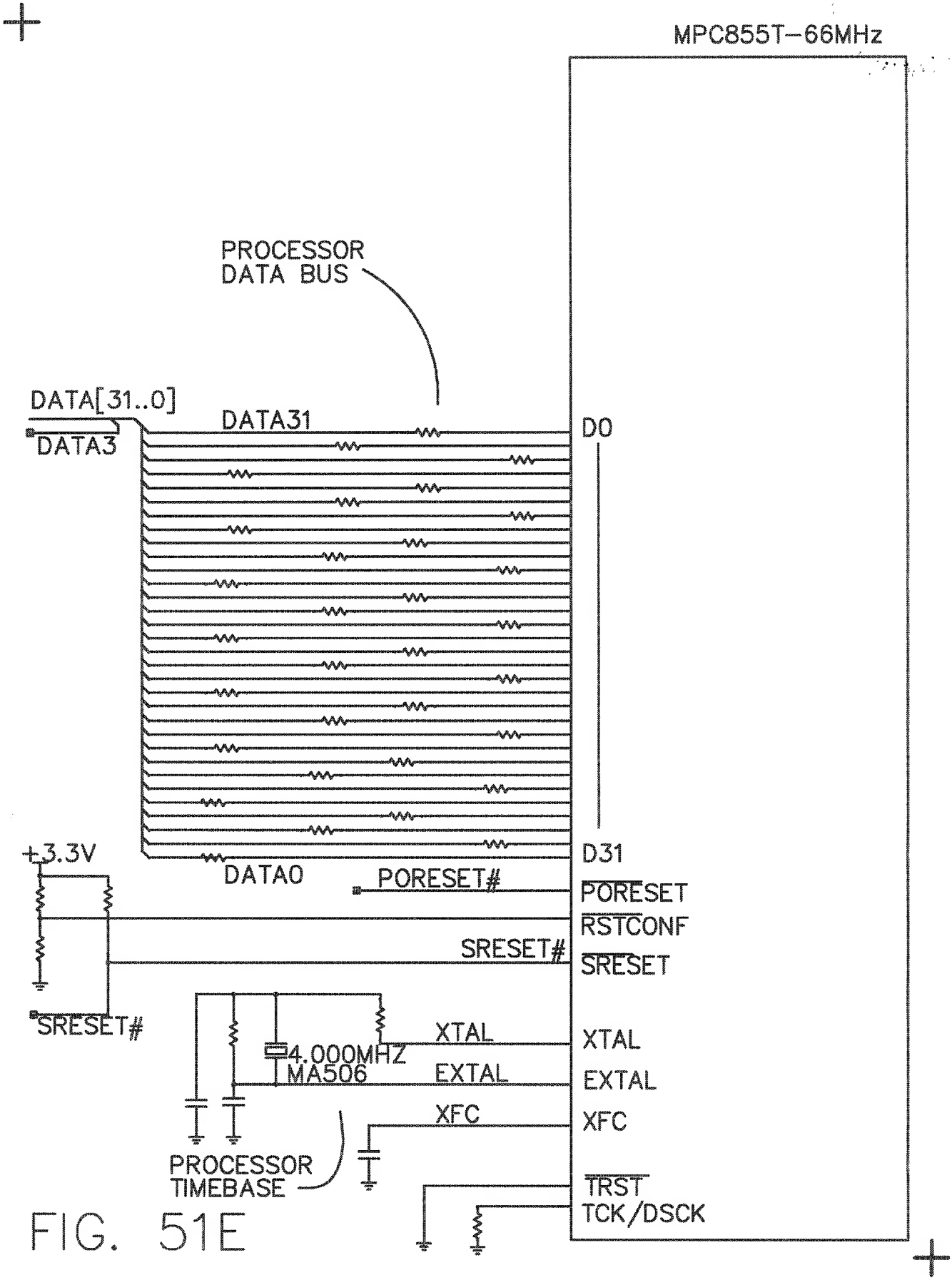

MPC855T-66MHz
PROCESSOR
DATA BUS
DATA[31..0]
DATA31
DATA3
D0
D31
DATA0
+3.3V
PORESET#
PORESET
RSTCONF
SRESET#
SRESET
SRESET#
XTAL
4.000MHZ
MA506
EXTAL
XTAL
EXTAL
XFC
XFC
PROCESSOR
TIMEBASE
TRST
TCK/DSCK

FIG. 51E

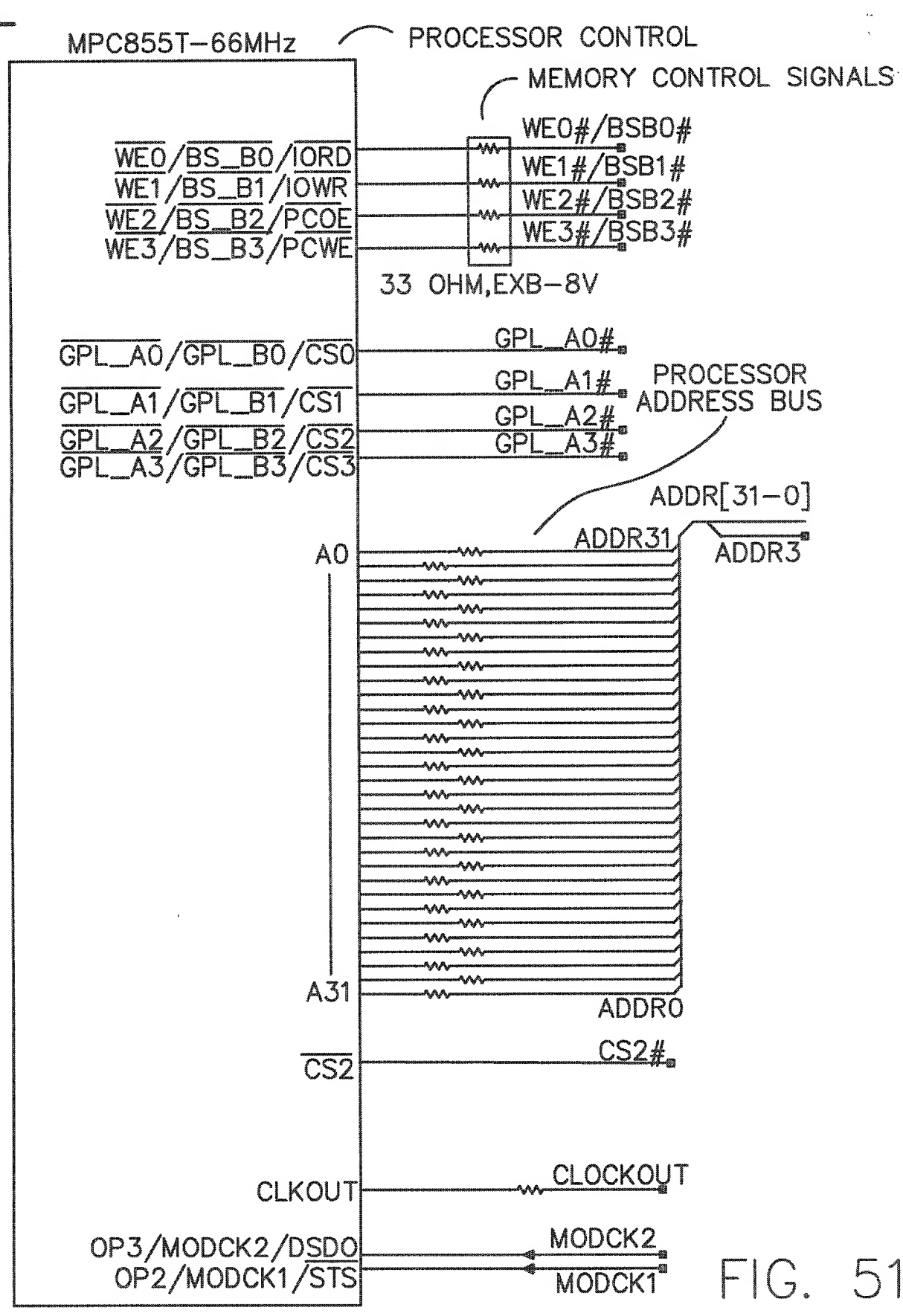

MPC855T-66MHz
PROCESSOR CONTROL
MEMORY CONTROL SIGNALS
WE0/BS_B0/IORD
WE1/BS_B1/IOWR
WE2/BS_B2/PCOE
WE3/BS_B3/PCWE
WE0#/BSB0#
WE1#/BSB1#
WE2#/BSB2#
WE3#/BSB3#
33 OHM,EXB-8V
GPL_A0/GPL_B0/CS0
GPL_A1/GPL_B1/CS1
GPL_A2/GPL_B2/CS2
GPL_A3/GPL_B3/CS3
GPL_A0#
GPL_A1#
GPL_A2#
GPL_A3#
PROCESSOR ADDRESS BUS
ADDR[31-0]
ADDR31
ADDR3
A0
A31
ADDR0
CS2
CS2#
CLKOUT
CLOCKOUT
OP3/MODCK2/DSDO
OP2/MODCK1/STS
MODCK2
MODCK1

FIG. 51F

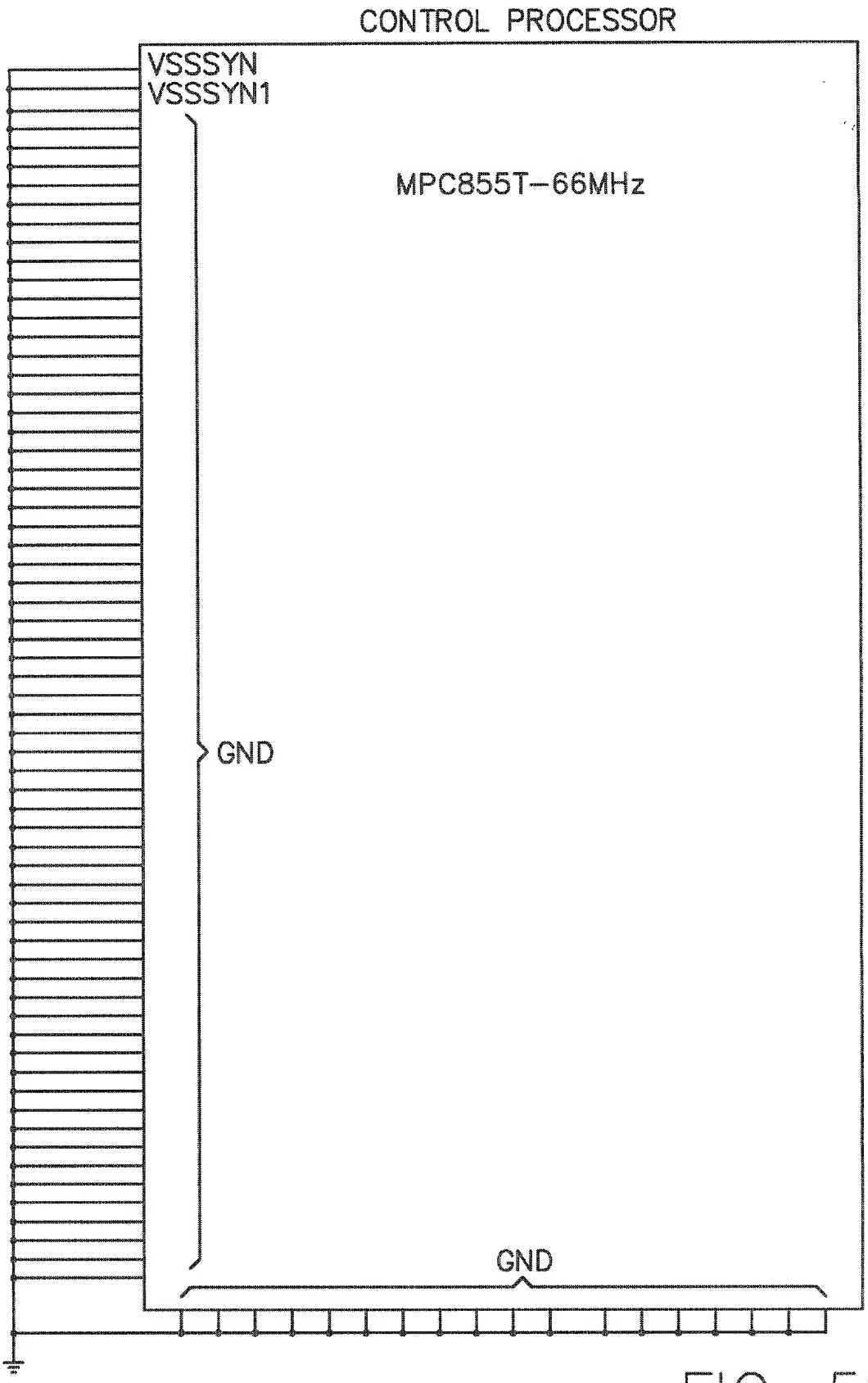


FIG. 51G

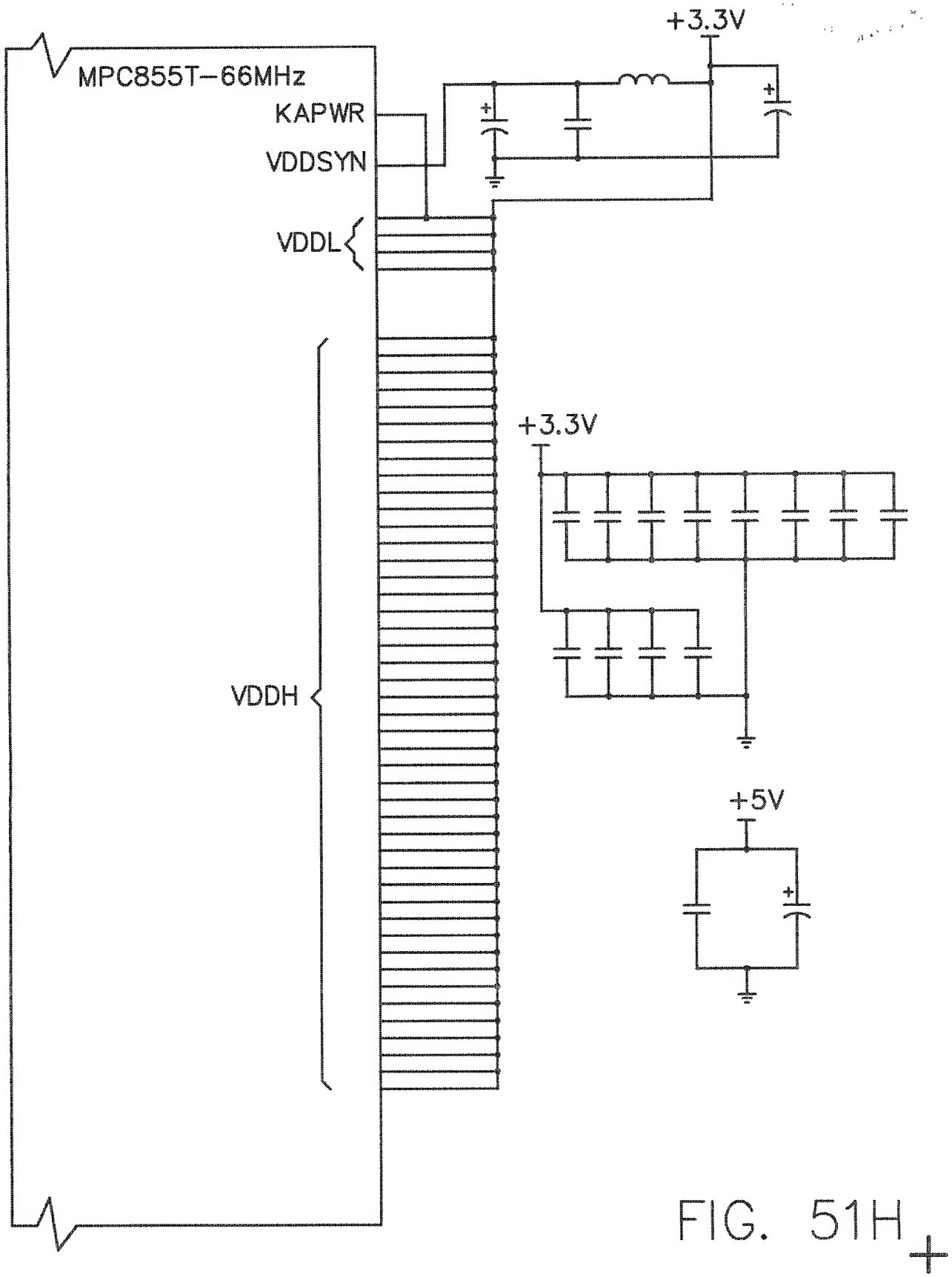


FIG. 51H

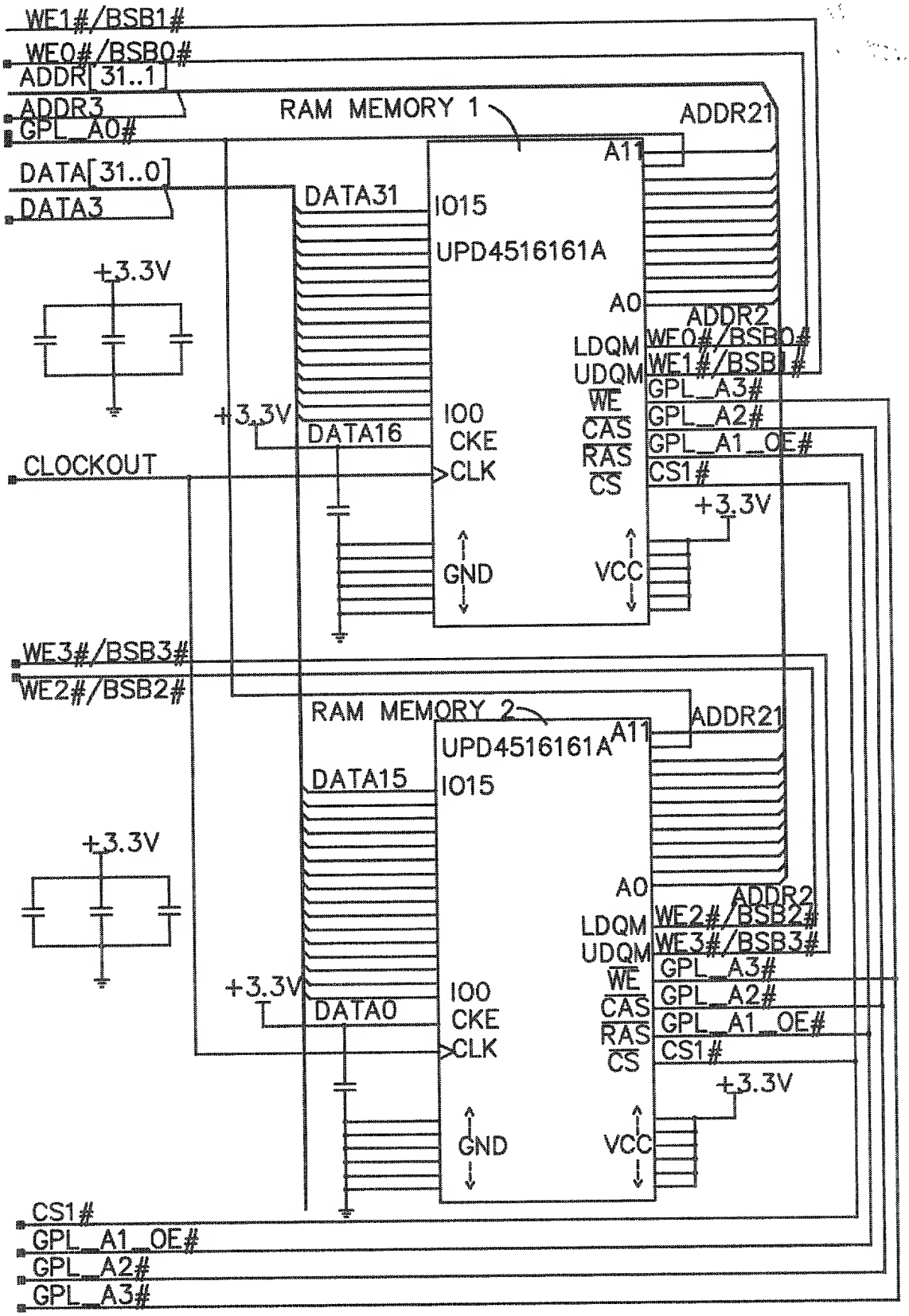

WE1#/BSB1#
WE0#/BSB0#
ADDR[31..1]
ADDR3
GPL_A0#
DATA[31..0]
DATA3
RAM MEMORY 1
ADDR21
A11
DATA31
IO15
UPD4516161A
A0
ADDR2
LDQM
UDQM
WE
CAS
RAS
CS
WE0#/BSB0#
WE1#/BSB1#
GPL_A3#
GPL_A2#
GPL_A1_OE#
CS1#
+3.3V
DATA16
IO0
CKE
CLK
CLOCKOUT
GND
VCC
WE3#/BSB3#
WE2#/BSB2#
RAM MEMORY 2
ADDR21
A11
UPD4516161A
DATA15
IO15
A0
ADDR2
WE2#/BSB2#
WE3#/BSB3#
GPL_A3#
GPL_A2#
GPL_A1_OE#
CS1#
+3.3V
DATA0
IO0
CKE
CLK
GND
VCC
CS1#
GPL_A1_OE#
GPL_A2#
GPL_A3#

FIG. 511

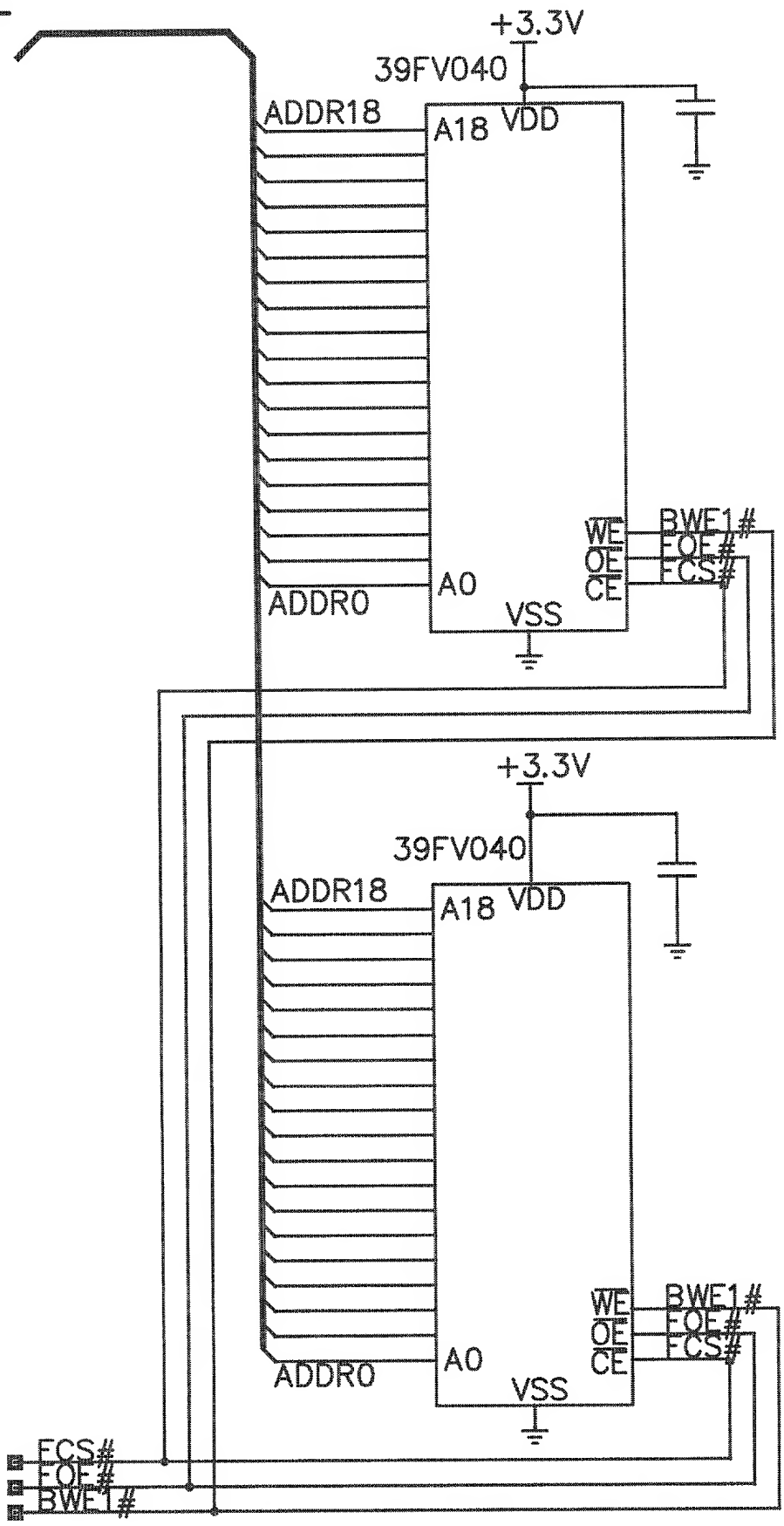

+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
ADDR0
A0
VSS
+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
ADDR0
A0
VSS
FCS#
FOE#
BWE1#

FIG. 51J

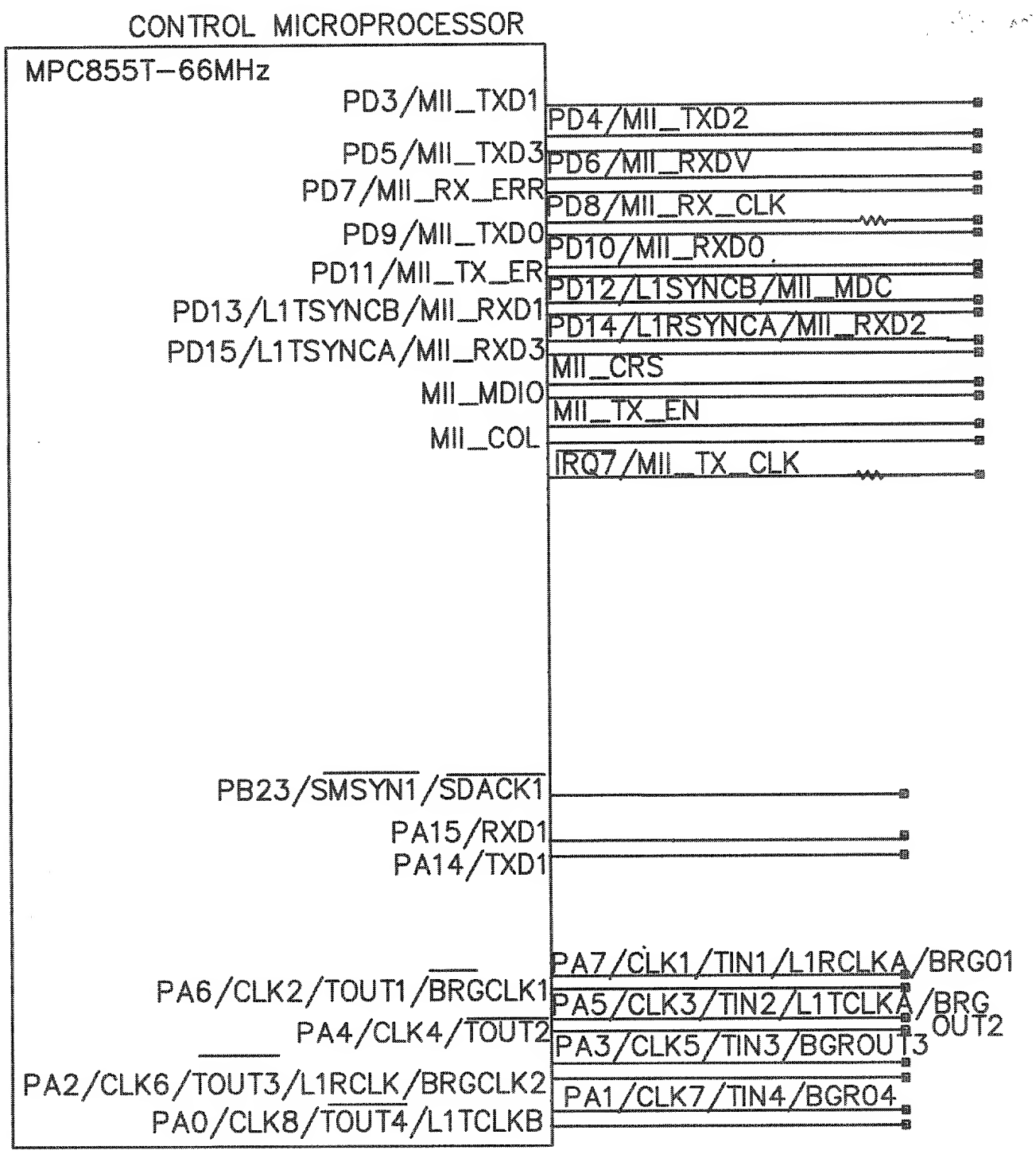

CONTROL MICROPROCESSOR
MPC855T–66MHz
PD3/MII_TXD1
PD4/MII_TXD2
PD5/MII_TXD3
PD6/MII_RXDV
PD7/MII_RX_ERR
PD8/MII_RX_CLK
PD9/MII_TXD0
PD10/MII_RXD0
PD11/MII_TX_ER
PD12/L1SYNCB/MII_MDC
PD13/L1TSYNCB/MII_RXD1
PD14/L1RSYNCA/MII_RXD2
PD15/L1TSYNCA/MII_RXD3
MII_CRS
MII_MDIO
MII_TX_EN
MII_COL
IRQ7/MII_TX_CLK
PB23/SMSYN1/SDACK1
PA15/RXD1
PA14/TXD1
PA7/CLK1/TIN1/L1RCLKA/BRG01
PA6/CLK2/TOUT1/BRGCLK1
PA5/CLK3/TIN2/L1TCLKA/BRG
PA4/CLK4/TOUT2
OUT2
PA3/CLK5/TIN3/BGROUT3
PA2/CLK6/TOUT3/L1RCLK/BRGCLK2
PA1/CLK7/TIN4/BGR04
PA0/CLK8/TOUT4/L1TCLKB

FIG. 51K

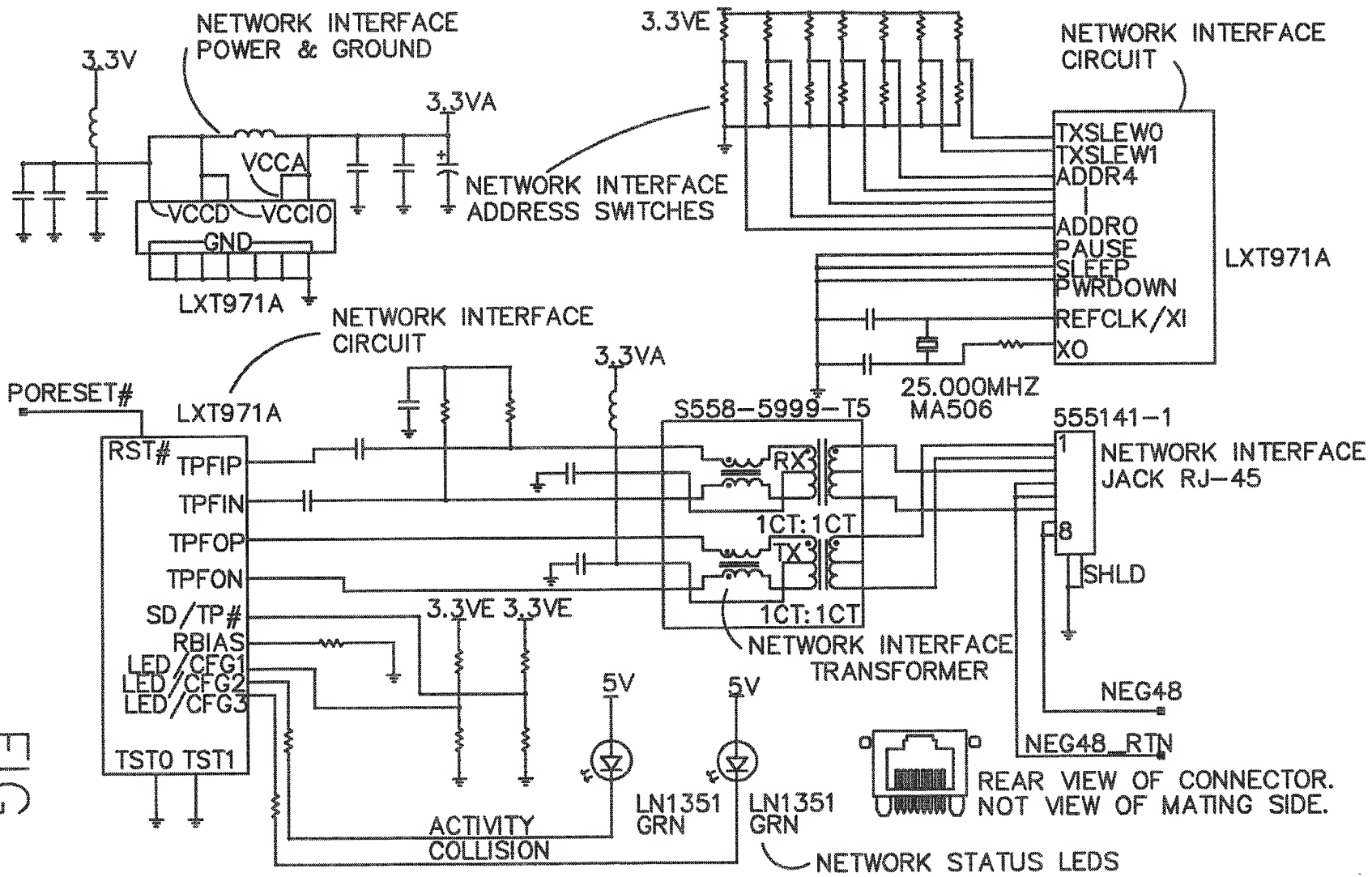

NETWORK INTERFACE
POWER & GROUND
3.3V
3.3VA
VCCA
VCCD
VCCIO
GND
LXT971A
NETWORK INTERFACE
ADDRESS SWITCHES
3.3VE
NETWORK INTERFACE
CIRCUIT
TXSLEW0
TXSLEW1
ADDR4
ADDR0
PAUSE
SLEEP
PWRDOWN
REFCLK/XI
XO
LXT971A
25.000MHZ
MA506
NETWORK INTERFACE
CIRCUIT
LXT971A
PORESET#
RST#
TPFIP
TPFIN
TPFOP
TPFON
SD/TP#
RBIAS
LED/CFG1
LED/CFG2
LED/CFG3
TST0 TST1
3.3VA
S558-5999-T5
RX
1CT:1CT
TX
1CT:1CT
NETWORK INTERFACE
TRANSFORMER
555141-1
1
8
NETWORK INTERFACE
JACK RJ-45
SHLD
NEG48
NEG48_RTN
REAR VIEW OF CONNECTOR.
NOT VIEW OF MATING SIDE.
3.3VE 3.3VE
5V
5V
ACTIVITY
COLLISION
LN1351
GRN
LN1351
GRN
NETWORK STATUS LEDS

FIG. 51L

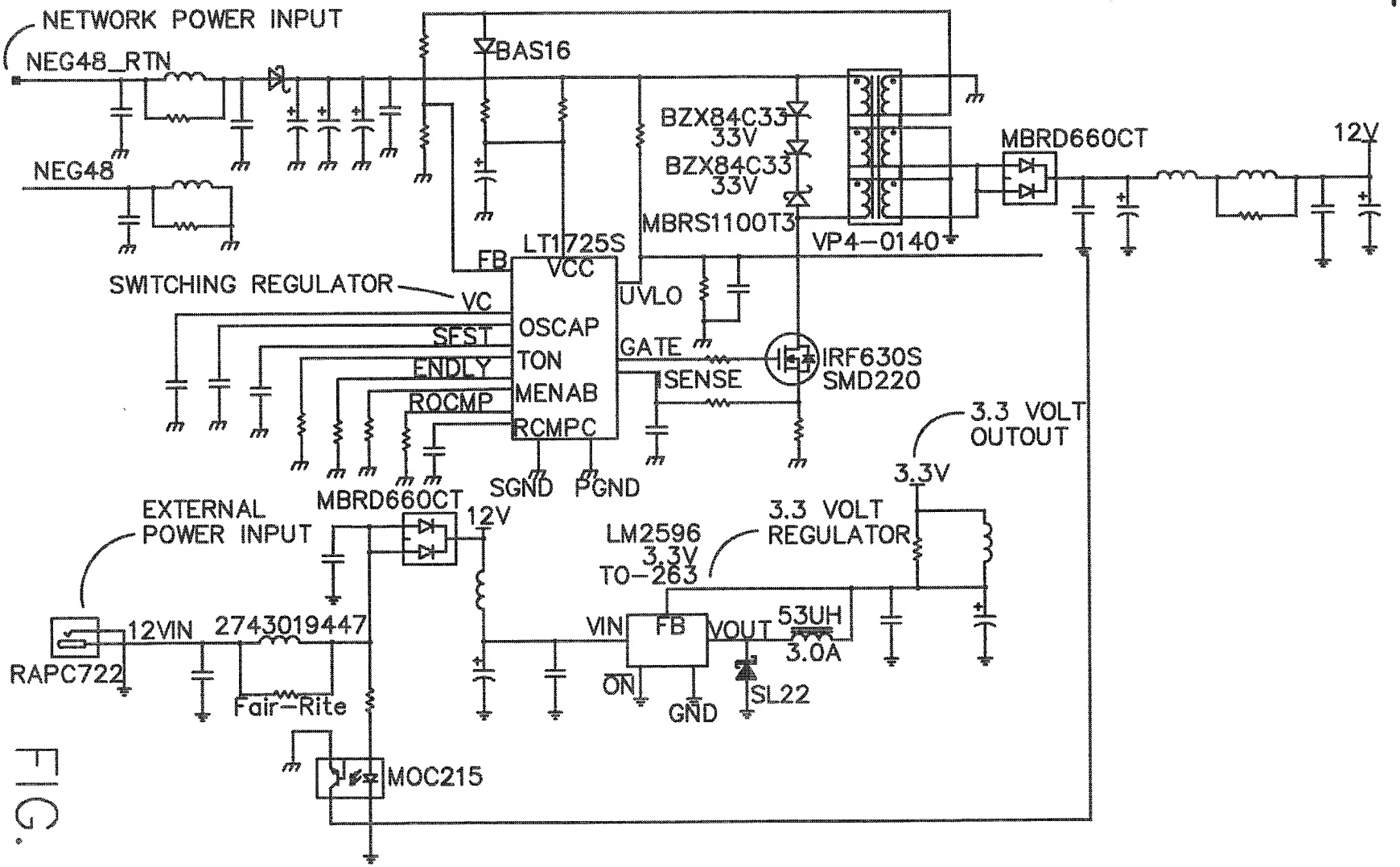
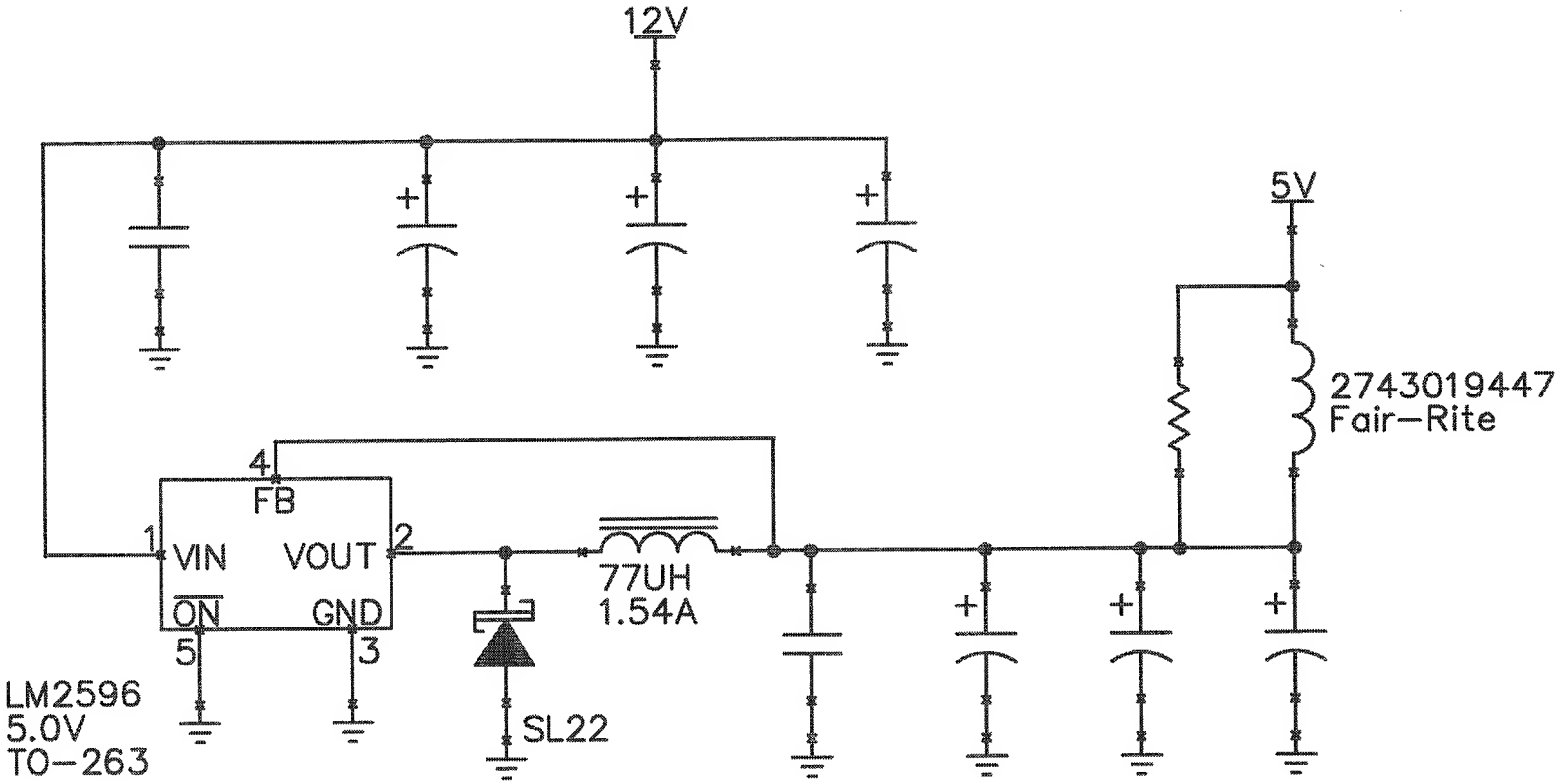

NETWORK POWER INPUT
NEG48_RTN
NEG48
BAS16
BZX84C33
33V
BZX84C33
33V
MBRS1100T3
VP4-0140
MBRD660CT
12V
LT1725S
FB
VCC
SWITCHING REGULATOR
VC
OSCAP
SFST
TON
ENDLY
MENAB
ROCMP
RCMPC
UVLO
GATE
SENSE
IRF630S
SMD220
SGND
PGND
3.3 VOLT
OUTOUT
3.3V
MBRD660CT
12V
EXTERNAL
POWER INPUT
LM2596
3.3V
TO-263
3.3 VOLT
REGULATOR
12VIN
2743019447
RAPC722
Fair-Rite
VIN
FB
VOUT
53UH
3.0A
ON
GND
SL22
MOC215

FIG. 51M



5.0 V REG CIN
3 EACH OF NICHICON PARTS:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1E470MCR1GS
UUD1V470MCR1GS

5.0 V REG COUT
1EA PANASONIC EEVFC2A680Q
3 EA NICHICON:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1C330MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1A470MCR1GS

FIG. 51N

20010-0045960

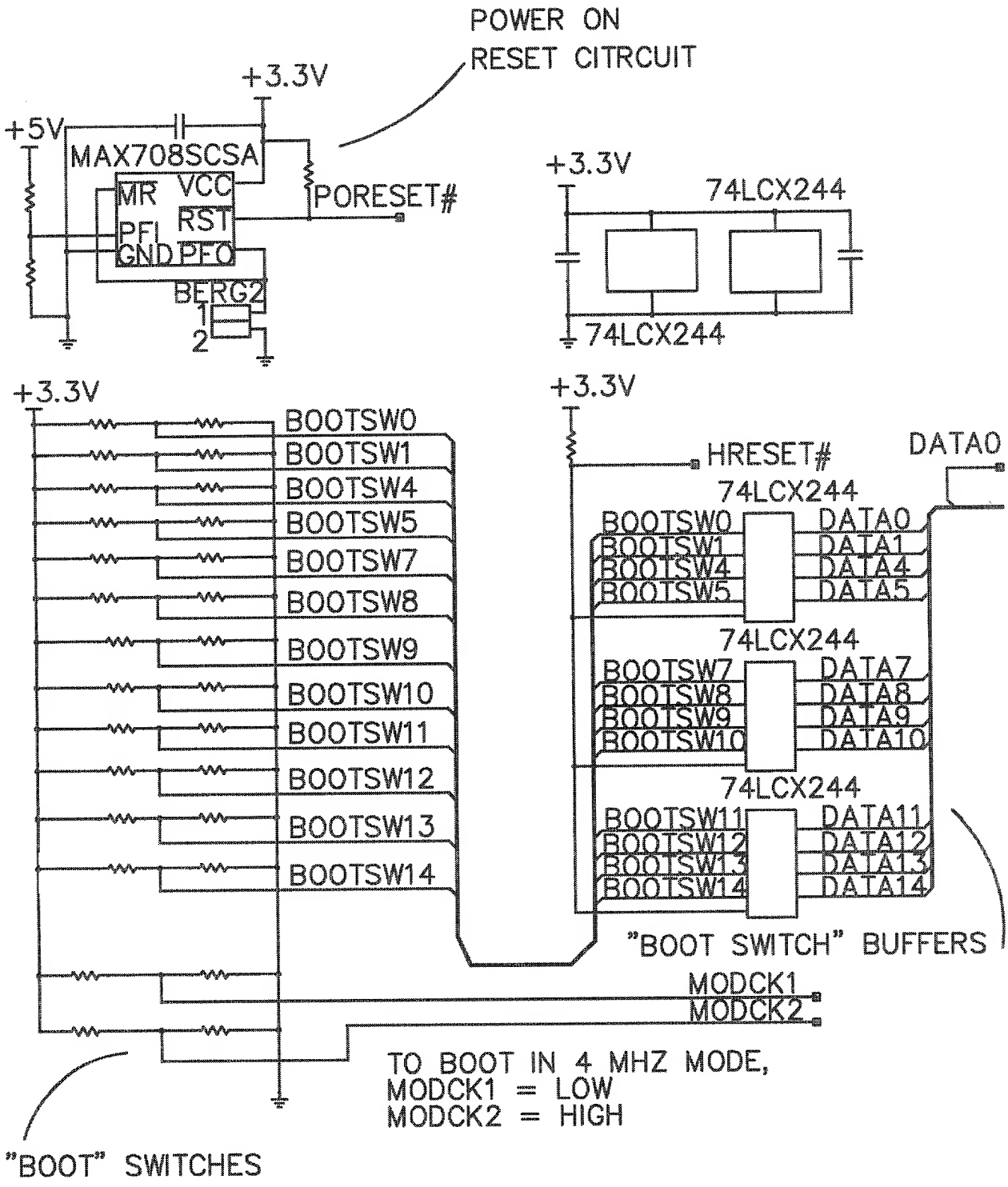


FIG. 510

20080TO" DET99660

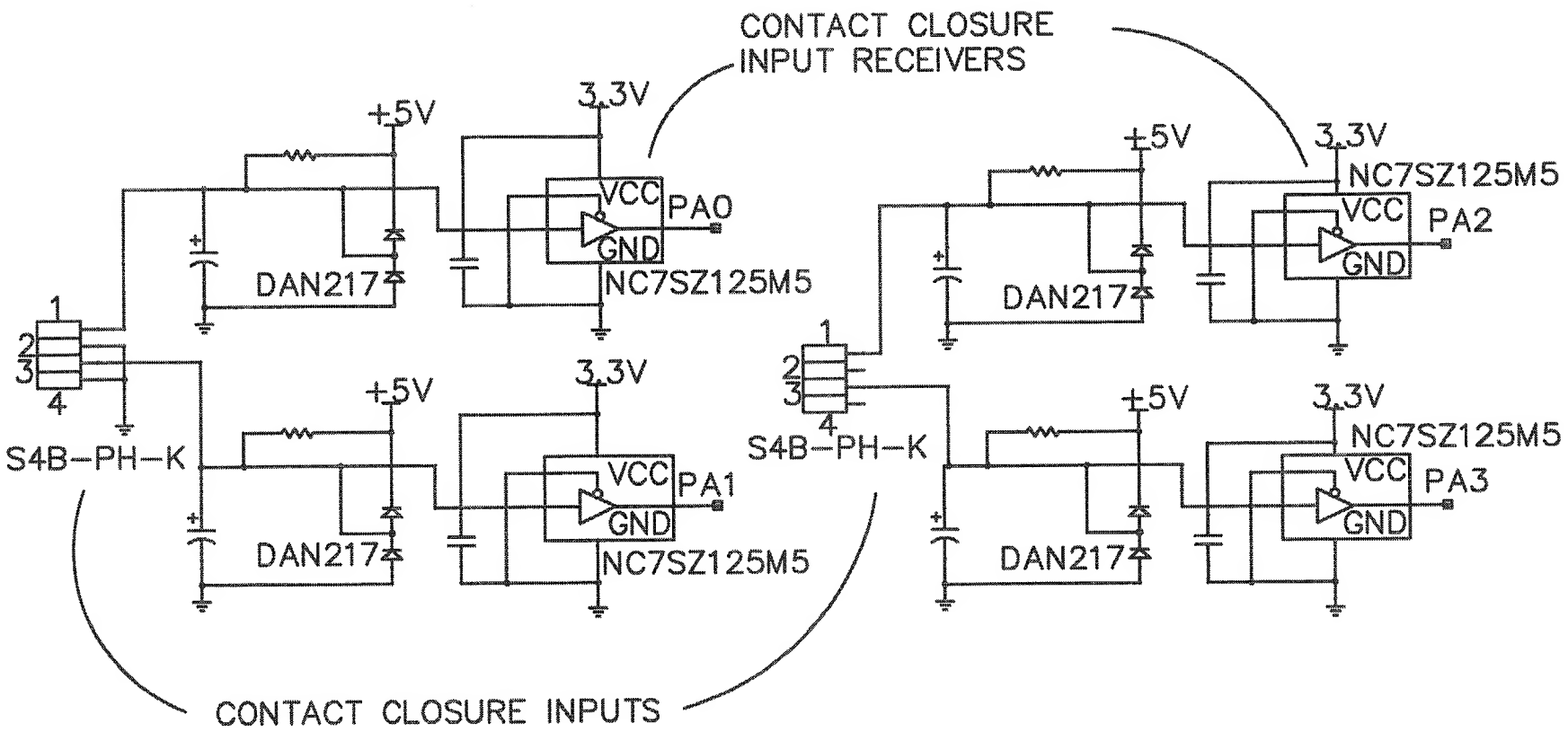


FIG. 51P

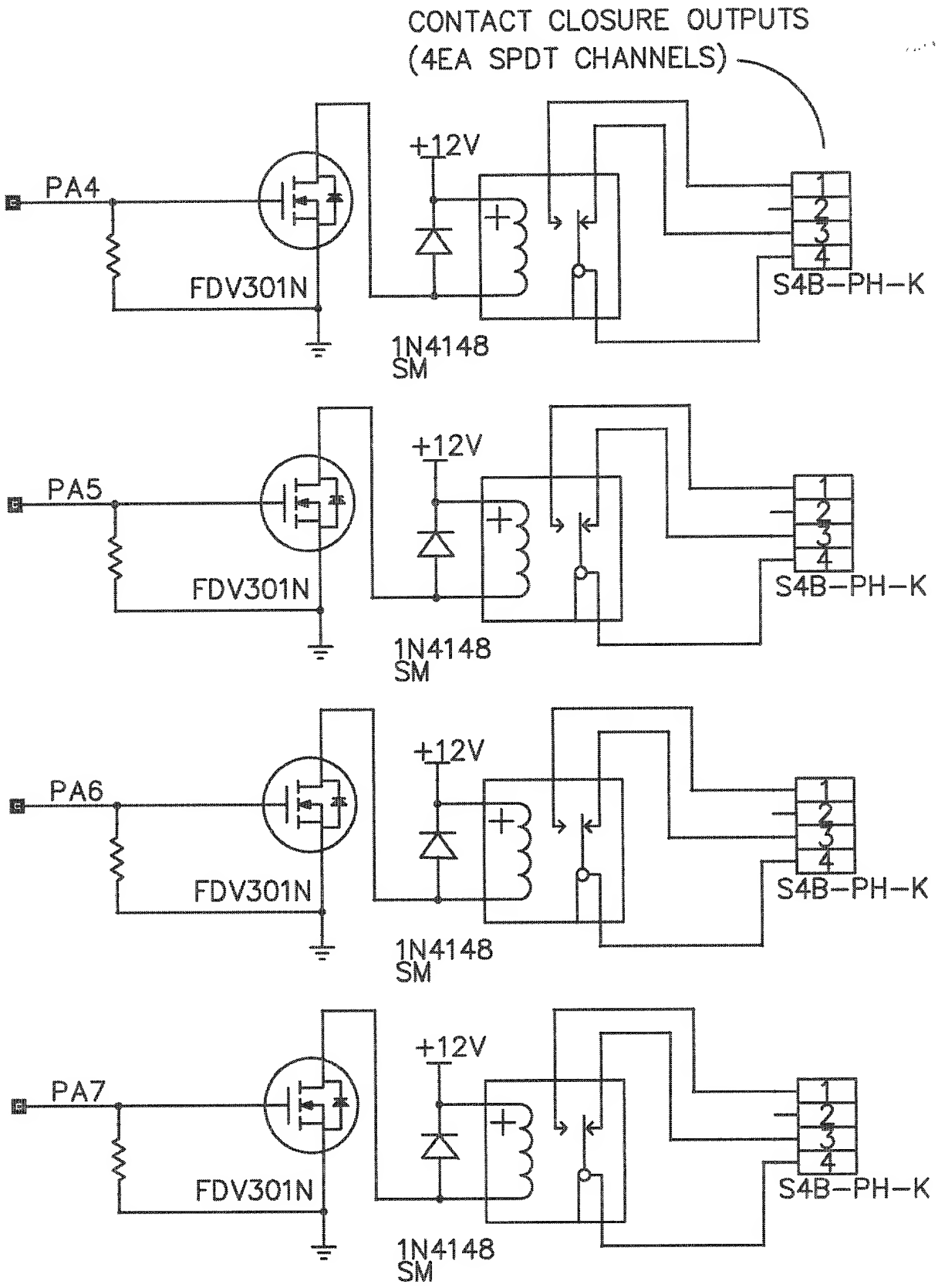

CONTACT CLOSURE OUTPUTS
(4EA SPDT CHANNELS)
PA4
PA5
PA6
PA7
FDV301N
+12V
1N4148
SM
S4B-PH-K
1
2
3
4

FIG. 51Q

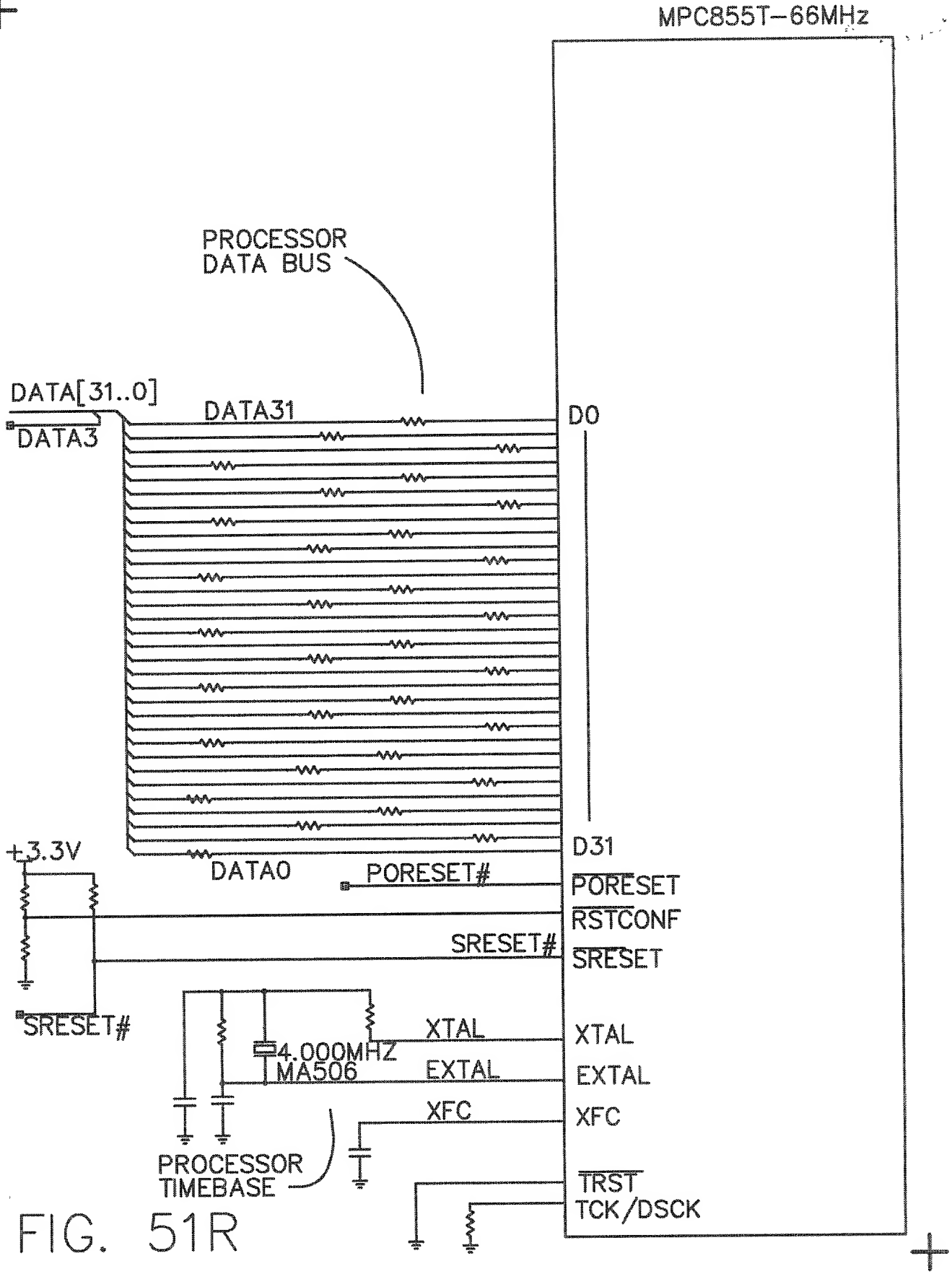

MPC855T-66MHz
PROCESSOR
DATA BUS
DATA[31..0]
DATA31
DATA3
D0
D31
DATA0
PORESET#
PORESET
RSTCONF
+3.3V
SRESET#
SRESET
SRESET#
XTAL
4.000MHZ
MA506
EXTAL
XFC
PROCESSOR
TIMEBASE
TRST
TCK/DSCK

FIG. 51R

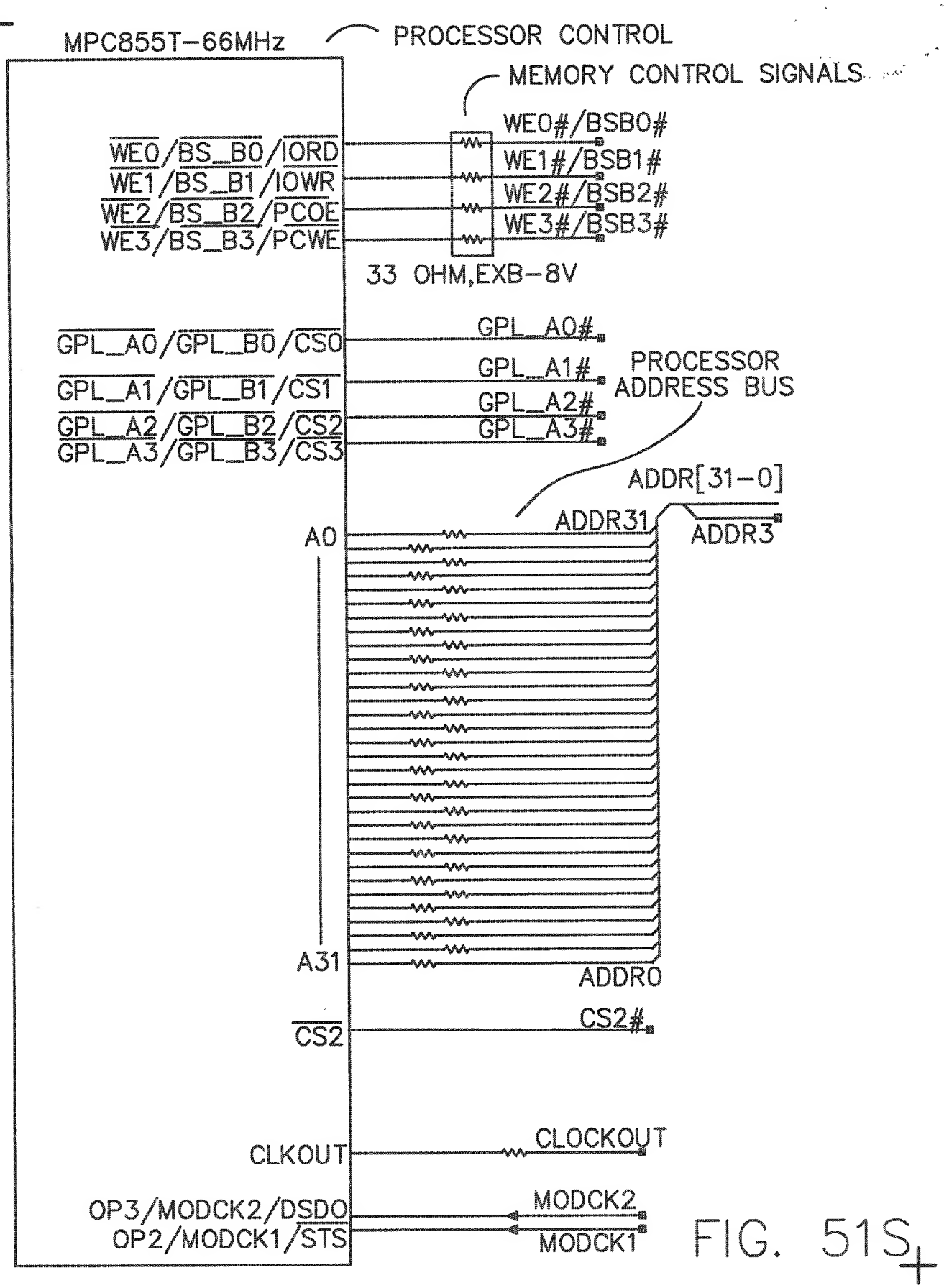

MPC855T-66MHz
PROCESSOR CONTROL
MEMORY CONTROL SIGNALS
WE0/BS_B0/IORD
WE1/BS_B1/IOWR
WE2/BS_B2/PCOE
WE3/BS_B3/PCWE
WE0#/BSB0#
WE1#/BSB1#
WE2#/BSB2#
WE3#/BSB3#
33 OHM,EXB-8V
GPL_A0/GPL_B0/CS0
GPL_A1/GPL_B1/CS1
GPL_A2/GPL_B2/CS2
GPL_A3/GPL_B3/CS3
GPL_A0#
GPL_A1#
GPL_A2#
GPL_A3#
PROCESSOR ADDRESS BUS
ADDR[31-0]
ADDR31
ADDR3
A0
A31
ADDR0
CS2
CS2#
CLKOUT
CLOCKOUT
OP3/MODCK2/DSDO
OP2/MODCK1/STS
MODCK2
MODCK1

FIG. 51S

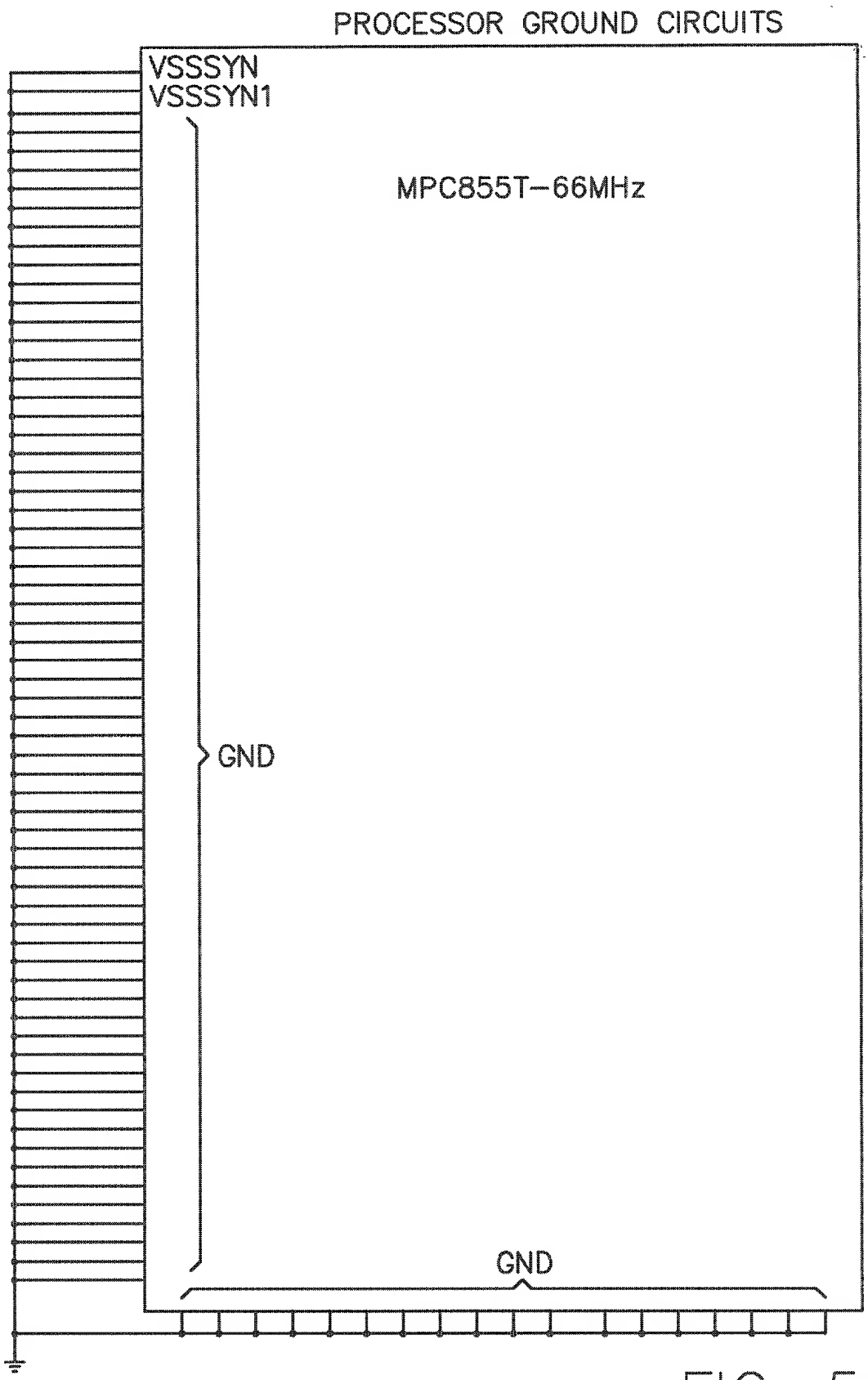

PROCESSOR GROUND CIRCUITS
VSSSYN
VSSSYN1
MPC855T-66MHz
GND
GND

FIG. 51T

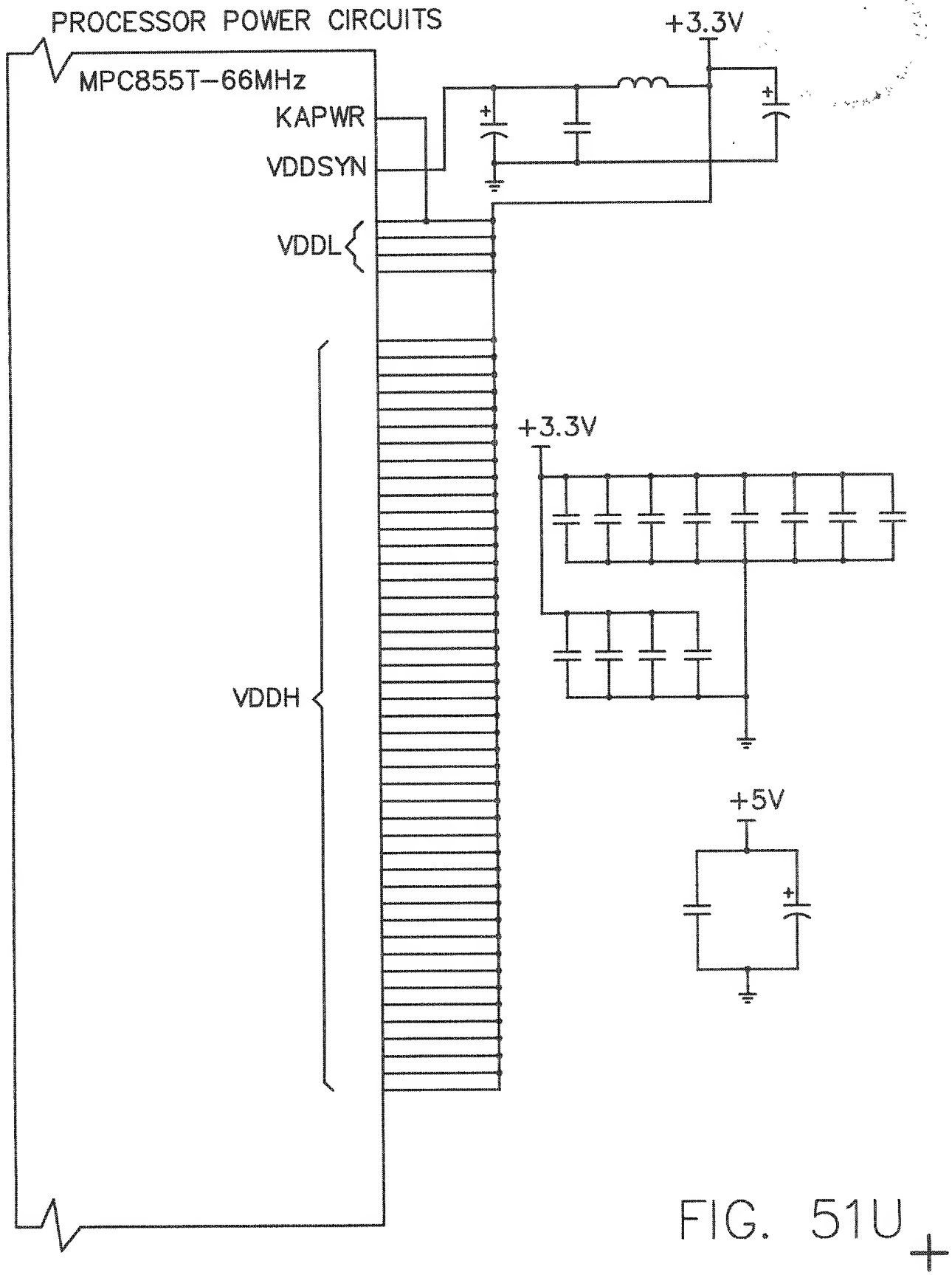

PROCESSOR POWER CIRCUITS
MPC855T–66MHz
KAPWR
VDDSYN
VDDL
VDDH
+3.3V
+3.3V
+5V

FIG. 51U

2080FO" 0E199660

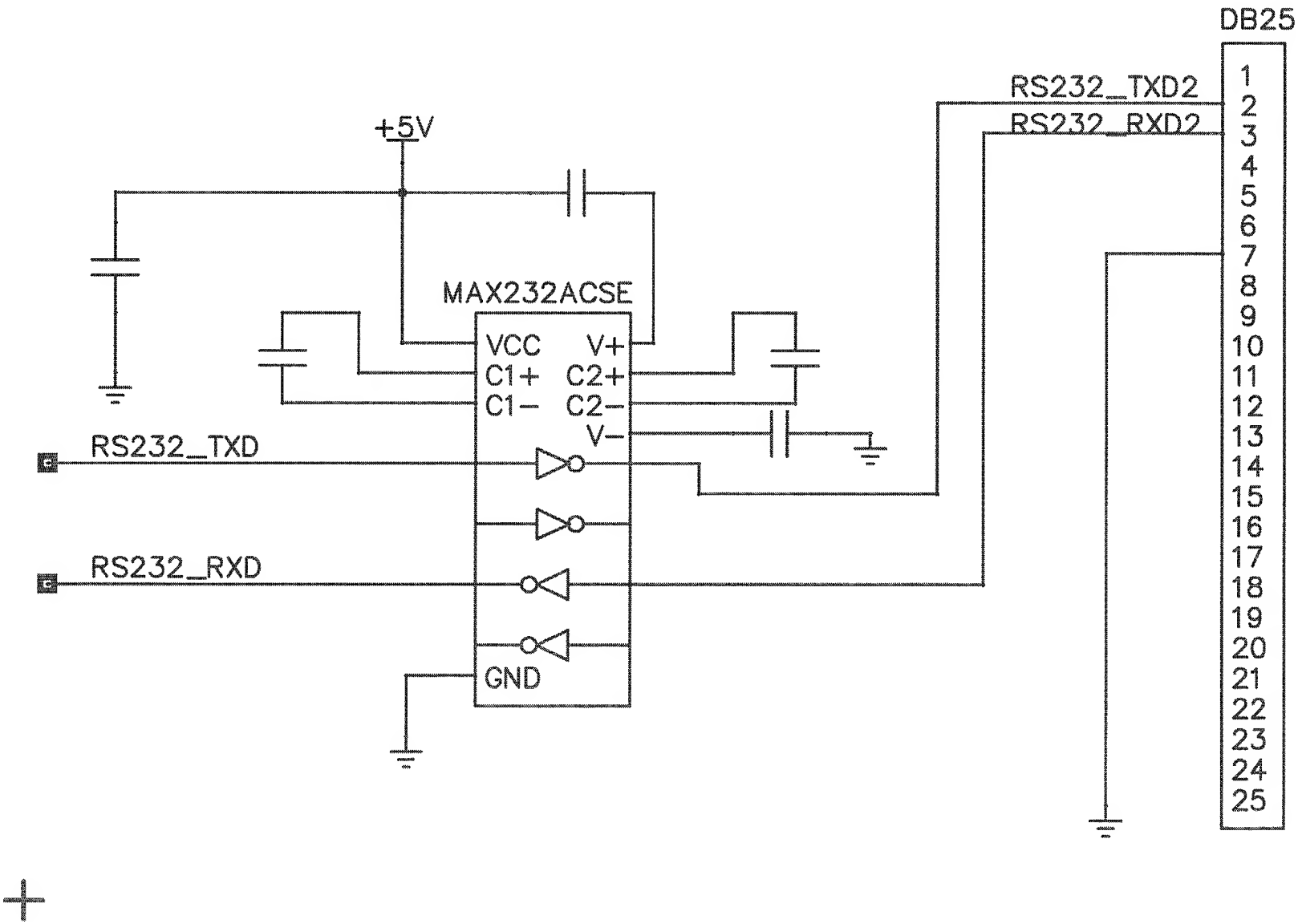


FIG. 51V+

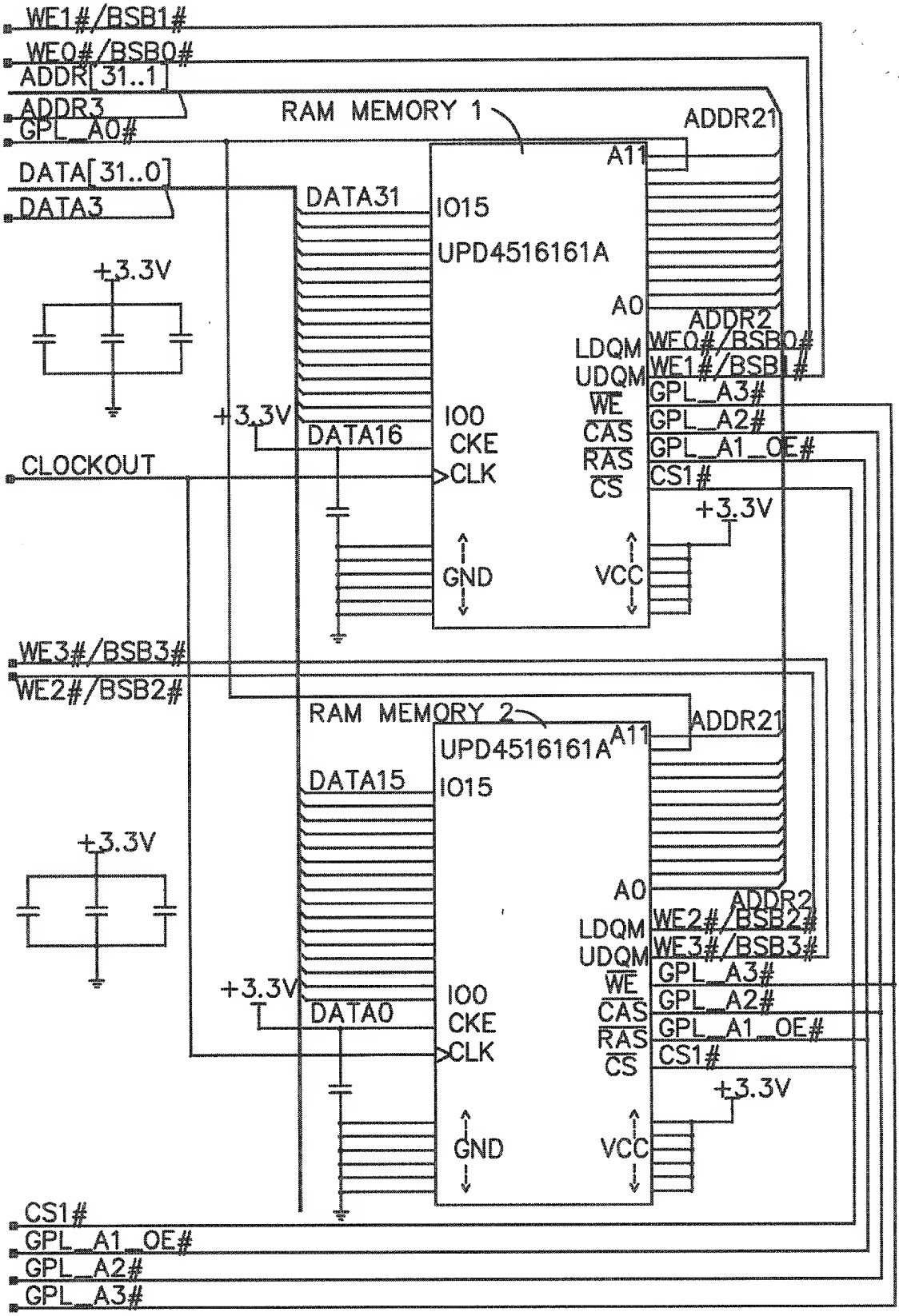

WE1#/BSB1#
WE0#/BSB0#
ADDR[31..1]
ADDR3
GPL_A0#
DATA[31..0]
DATA3
RAM MEMORY 1
ADDR21
A11
DATA31
IO15
UPD4516161A
A0
ADDR2
LDQM
UDQM
WE
CAS
RAS
CS
WE0#/BSB0#
WE1#/BSB1#
GPL_A3#
GPL_A2#
GPL_A1_OE#
CS1#
+3.3V
DATA16
IO0
CKE
CLK
CLOCKOUT
GND
VCC
WE3#/BSB3#
WE2#/BSB2#
RAM MEMORY 2
ADDR21
A11
UPD4516161A
DATA15
IO15
A0
ADDR2
WE2#/BSB2#
WE3#/BSB3#
GPL_A3#
GPL_A2#
GPL_A1_OE#
CS1#
+3.3V
DATA0
IO0
CKE
CLK
GND
VCC
CS1#
GPL_A1_OE#
GPL_A2#
GPL_A3#

FIG. 51W+

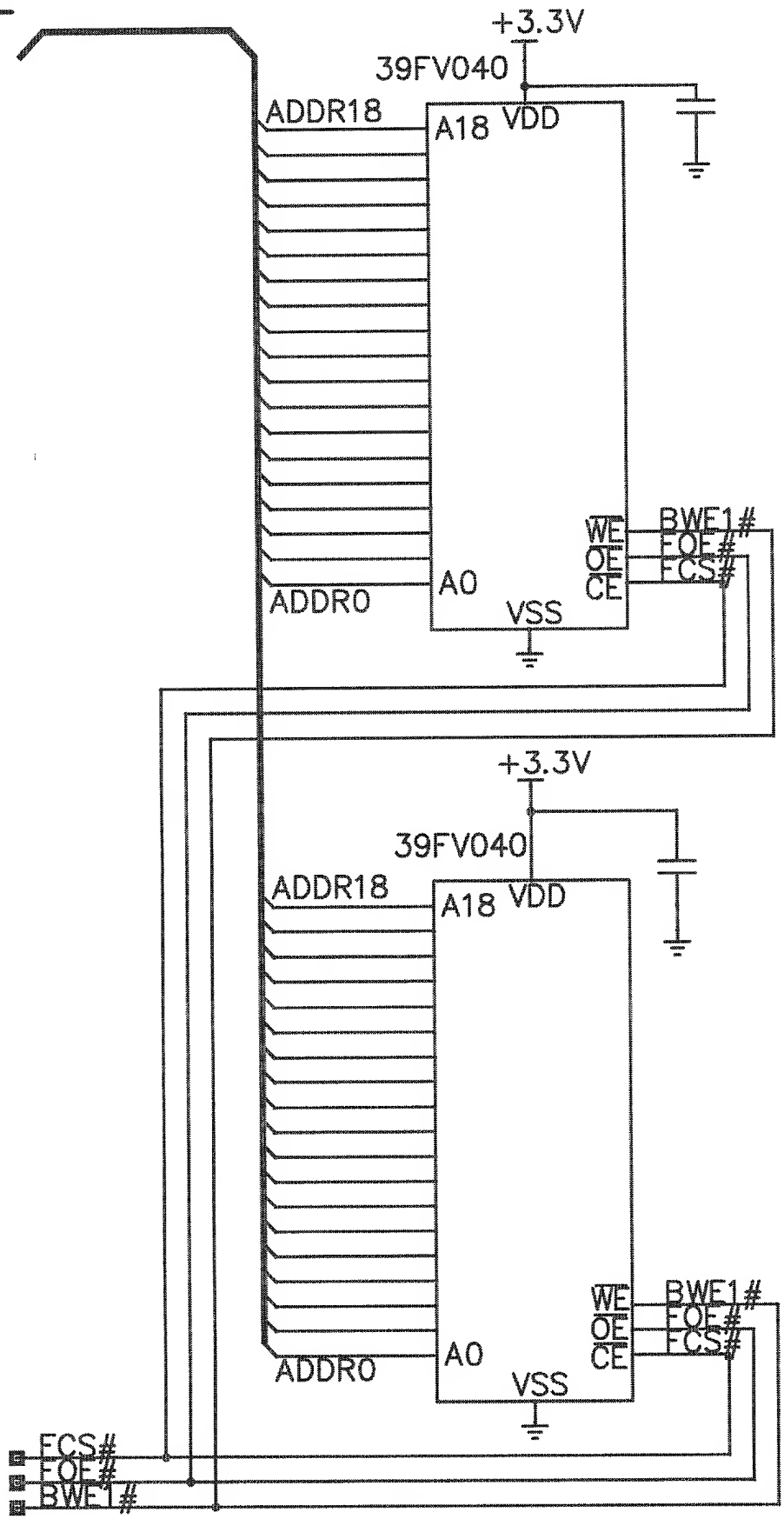

+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
ADDR0
A0
VSS
+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
ADDR0
A0
VSS
FCS#
FOE#
BWE1#

FIG. 51X

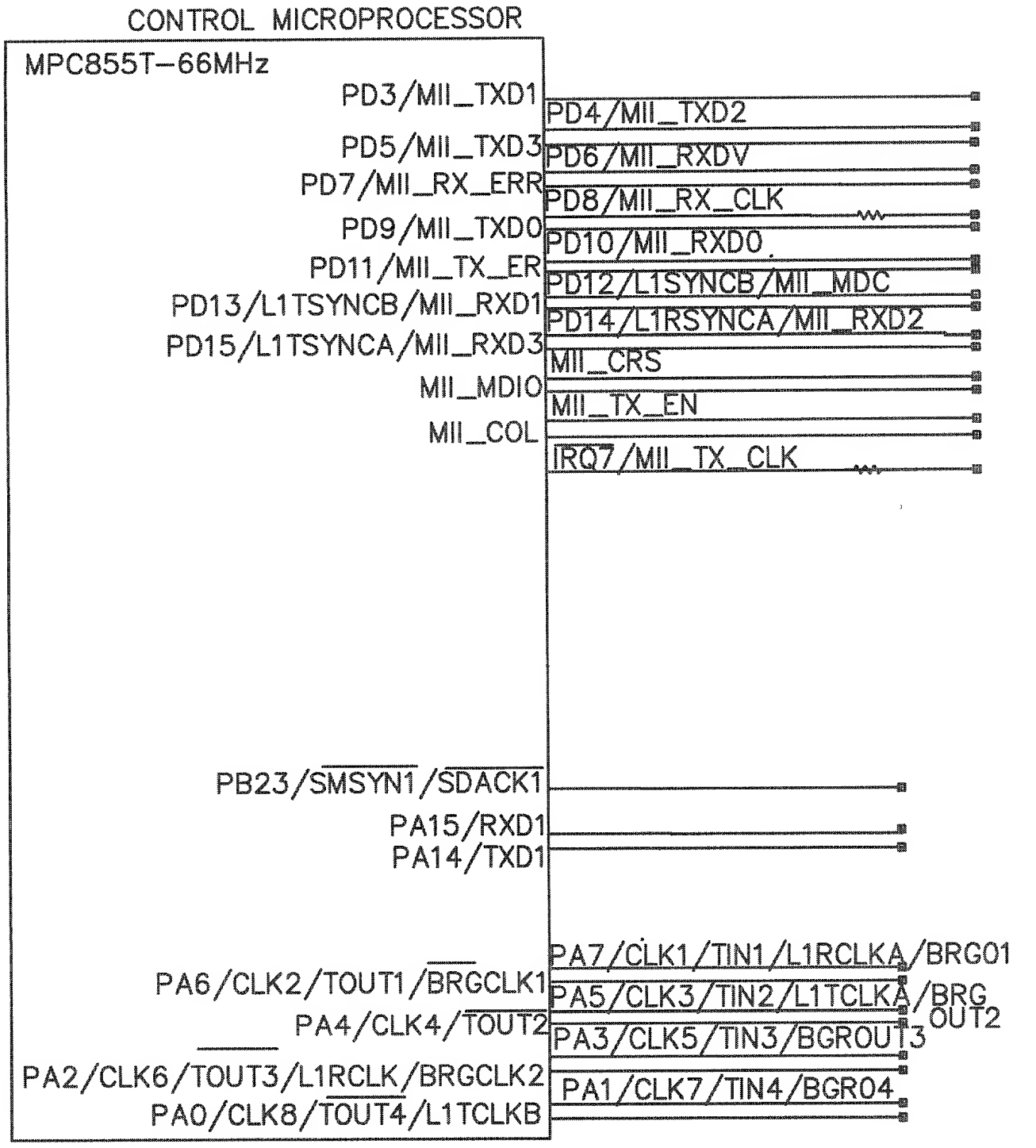

CONTROL MICROPROCESSOR
MPC855T–66MHz
PD3/MII_TXD1
PD4/MII_TXD2
PD5/MII_TXD3
PD6/MII_RXDV
PD7/MII_RX_ERR
PD8/MII_RX_CLK
PD9/MII_TXD0
PD10/MII_RXD0
PD11/MII_TX_ER
PD12/L1SYNCB/MII_MDC
PD13/L1TSYNCB/MII_RXD1
PD14/L1RSYNCA/MII_RXD2
PD15/L1TSYNCA/MII_RXD3
MII_CRS
MII_MDIO
MII_TX_EN
MII_COL
IRQ7/MII_TX_CLK
PB23/SMSYN1/SDACK1
PA15/RXD1
PA14/TXD1
PA7/CLK1/TIN1/L1RCLKA/BRG01
PA6/CLK2/TOUT1/BRGCLK1
PA5/CLK3/TIN2/L1TCLKA/BRG OUT2
PA4/CLK4/TOUT2
PA3/CLK5/TIN3/BGROUT3
PA2/CLK6/TOUT3/L1RCLK/BRGCLK2
PA1/CLK7/TIN4/BGR04
PA0/CLK8/TOUT4/L1TCLKB

FIG. 51Y

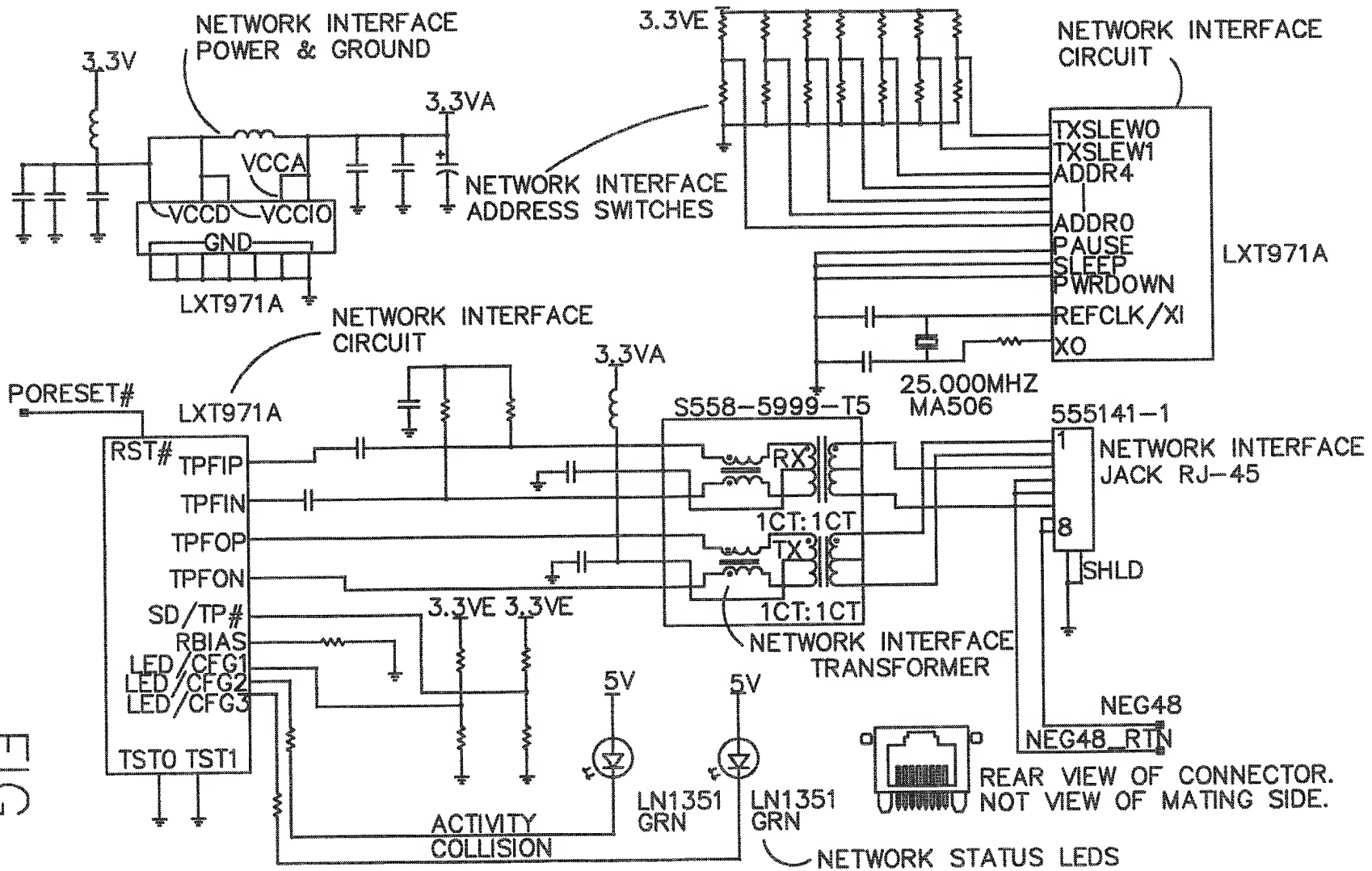

NETWORK INTERFACE
POWER & GROUND
3.3V
3.3VA
VCCA
VCCD
VCCIO
GND
LXT971A
NETWORK INTERFACE
ADDRESS SWITCHES
3.3VE
NETWORK INTERFACE
CIRCUIT
TXSLEW0
TXSLEW1
ADDR4
ADDR0
PAUSE
SLEEP
PWRDOWN
REFCLK/XI
XO
LXT971A
25.000MHZ
MA506
NETWORK INTERFACE
CIRCUIT
LXT971A
PORESET#
RST#
TPFIP
TPFIN
TPFOP
TPFON
SD/TP#
RBIAS
LED/CFG1
LED/CFG2
LED/CFG3
TST0 TST1
3.3VA
3.3VE 3.3VE
S558-5999-T5
RX
1CT:1CT
TX
1CT:1CT
NETWORK INTERFACE
TRANSFORMER
555141-1
1
8
NETWORK INTERFACE
JACK RJ-45
SHLD
NEG48
NEG48_RTN
REAR VIEW OF CONNECTOR.
NOT VIEW OF MATING SIDE.
5V
5V
LN1351
GRN
LN1351
GRN
ACTIVITY
COLLISION
NETWORK STATUS LEDS

FIG. 51Z

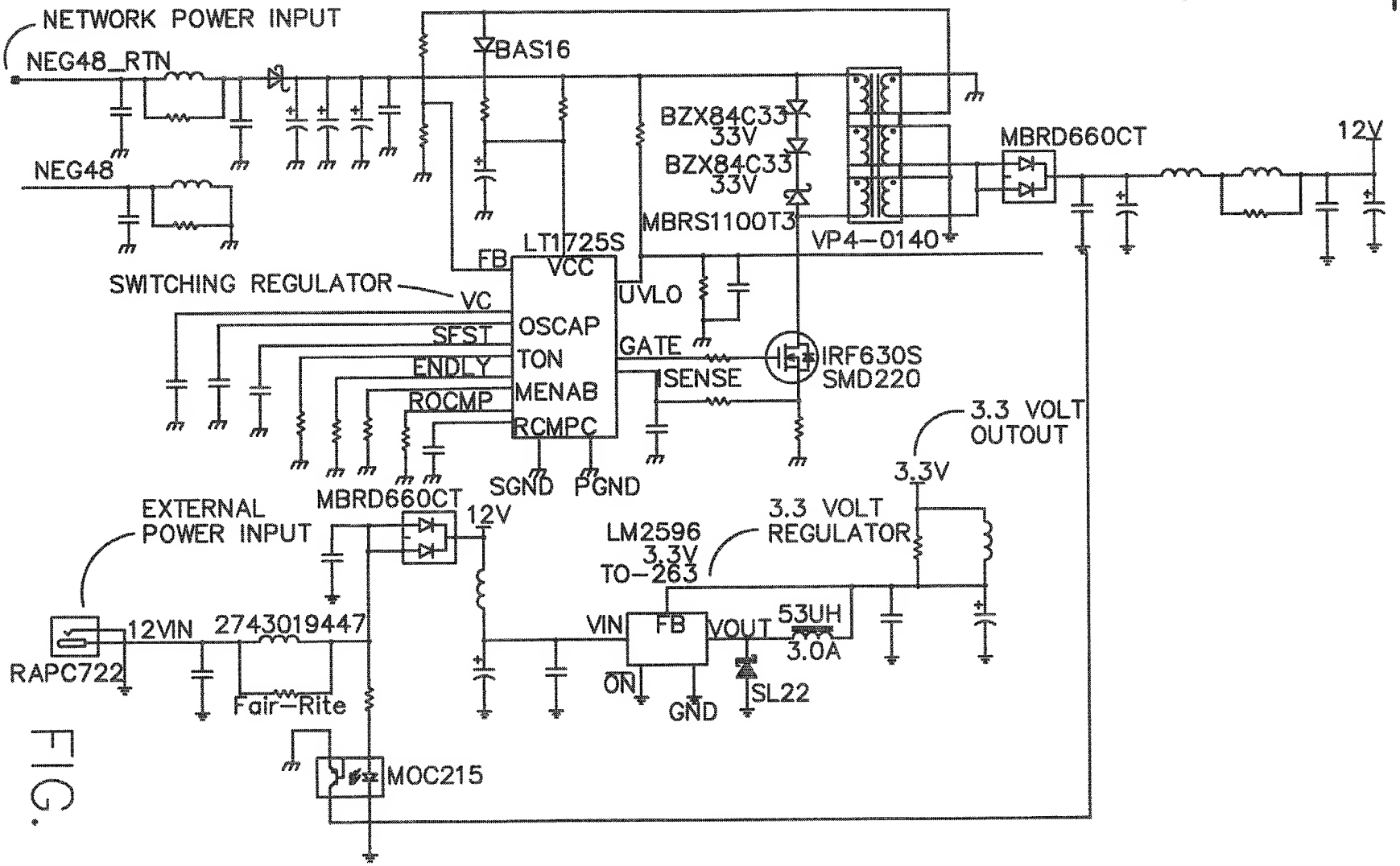
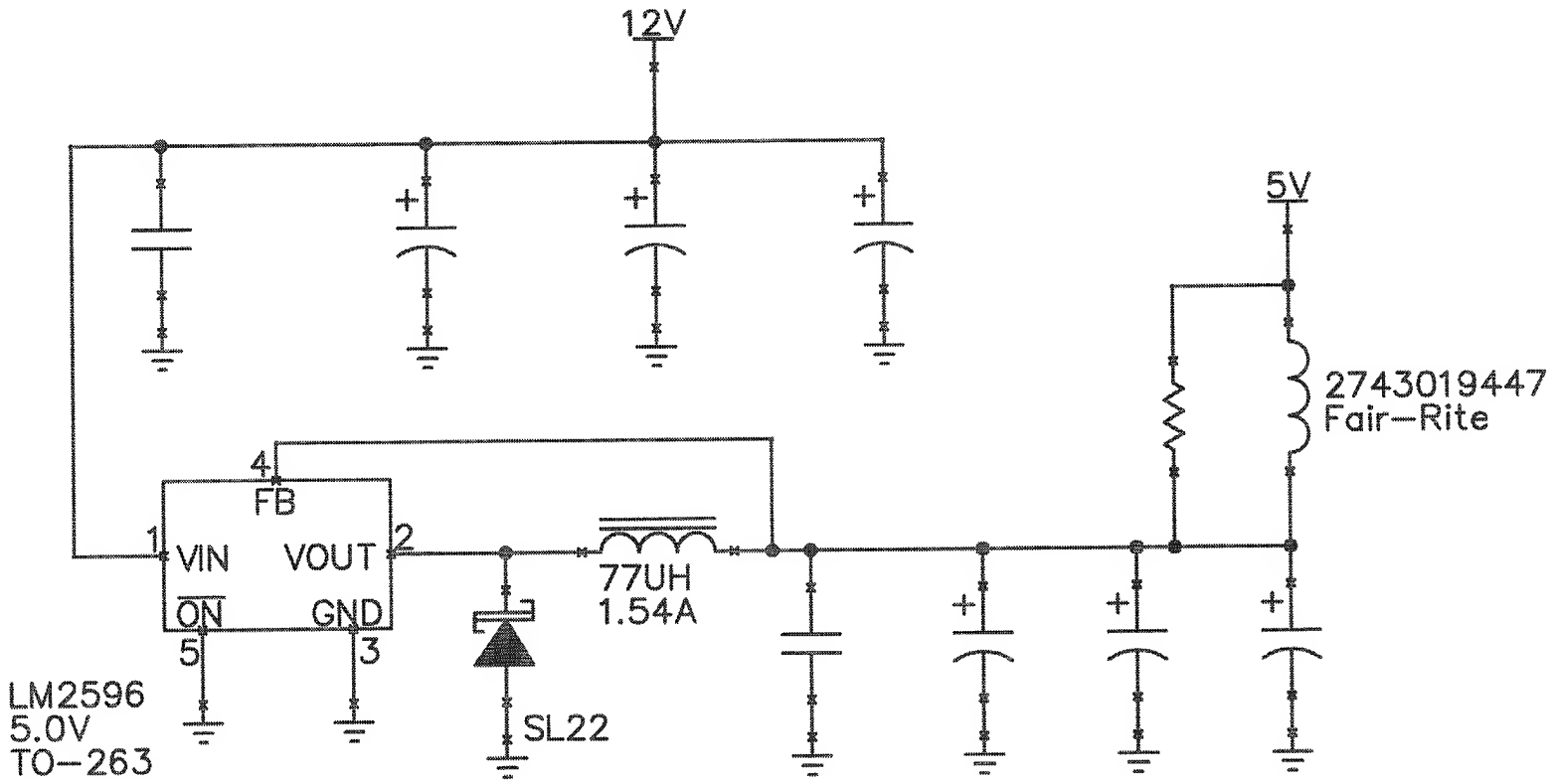

NETWORK POWER INPUT
NEG48_RTN
NEG48
BAS16
BZX84C33
33V
BZX84C33
33V
MBRS1100T3
VP4-0140
MBRD660CT
12V
LT1725S
FB
VCC
SWITCHING REGULATOR
VC
UVLO
SFST
OSCAP
GATE
IRF630S
SMD220
ENDLY
TON
SENSE
ROCMP
MENAB
RCMPC
3.3 VOLT
OUTOUT
3.3V
SGND
PGND
MBRD660CT
12V
EXTERNAL
POWER INPUT
LM2596
3.3V
TO-263
3.3 VOLT
REGULATOR
12VIN
2743019447
VIN
FB
VOUT
53UH
3.0A
RAPC722
Fair-Rite
ON
GND
SL22
MOC215

FIG. 51AA

20801D" 0ET99660



5.0 V REG CIN
3 EACH OF NICHICON PARTS:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1E470MCR1GS
UUD1V470MCR1GS

5.0 V REG COUT
1EA PANASONIC EEVFC2A680Q
3 EA NICHICON:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1C330MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1A470MCR1GS

FIG. 51BB